



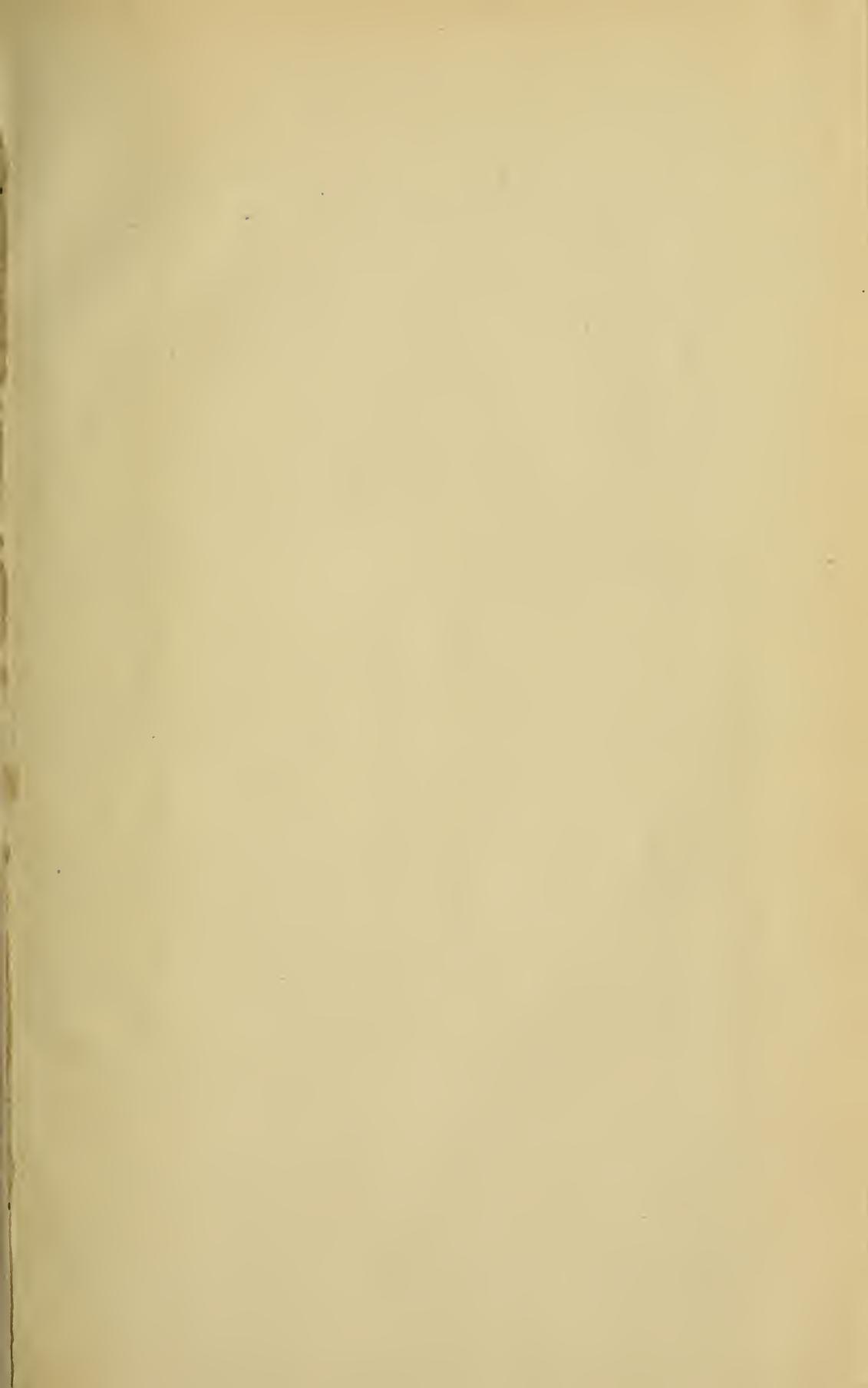
*The  
American  
University  
Library*

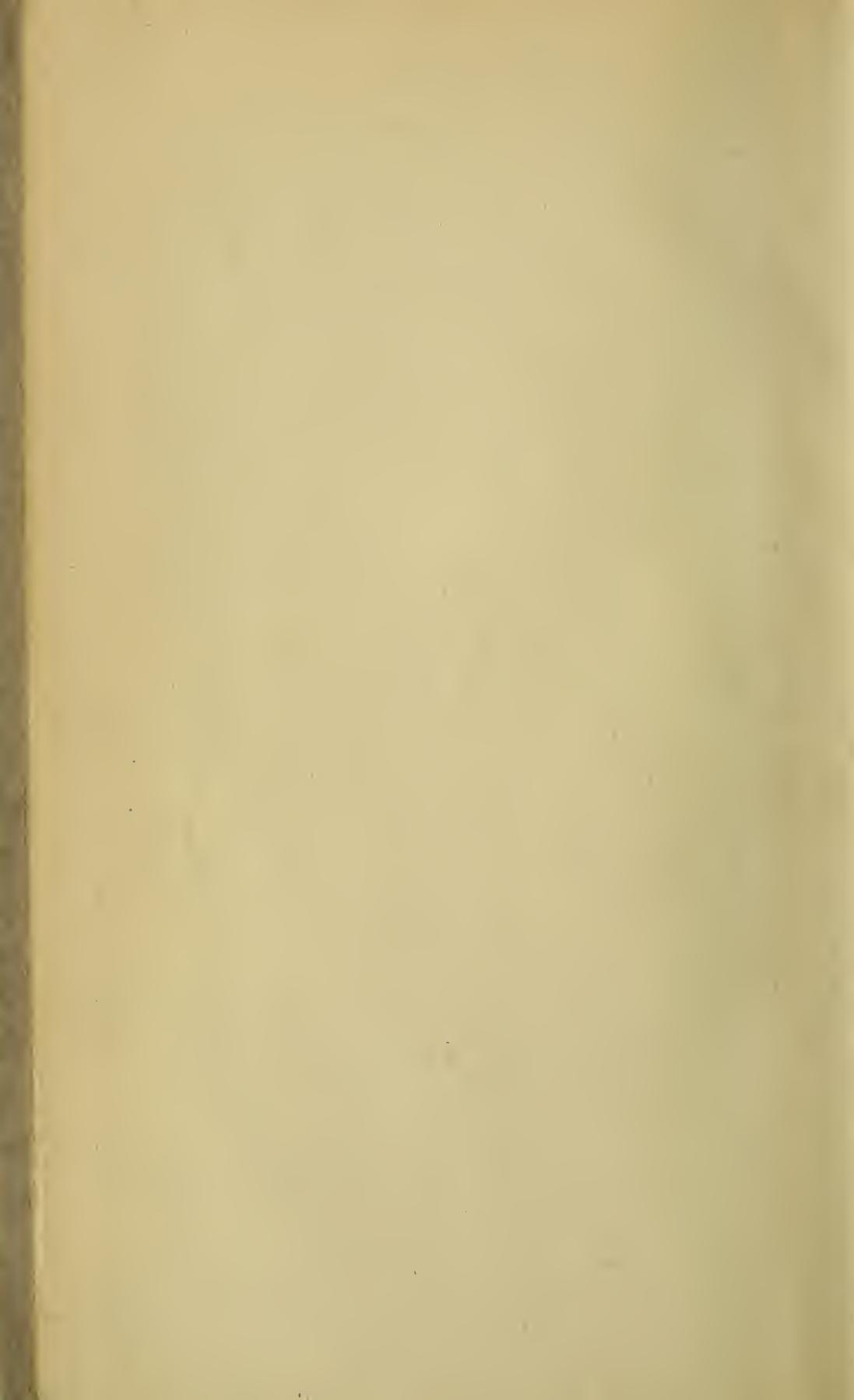
WASHINGTON, D. C.











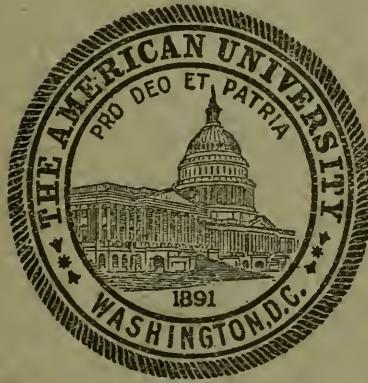
# *American University Courier*

VOL. XXI, No. 3

DECEMBER, 1914

## CATALOGUE NUMBER

1914-1916



*Published by the American University  
Washington, D. C.*

*Entered as second-class matter February 27, 1904  
at the Post Office at Washington, D. C.  
under Act of July 16, 1894*

AMERICAN UNIVERSITY LIBRARY  
JULY 16 1936



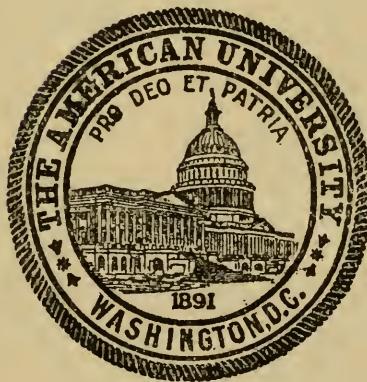
# *American University*, *Courier*

VOL. XXI, No. 3

DECEMBER, 1914

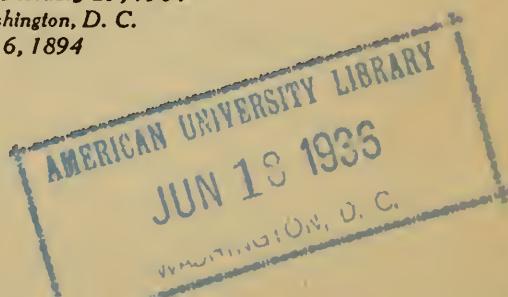
## CATALOGUE NUMBER

1914-1916



*Published by the American University  
Washington, D. C.*

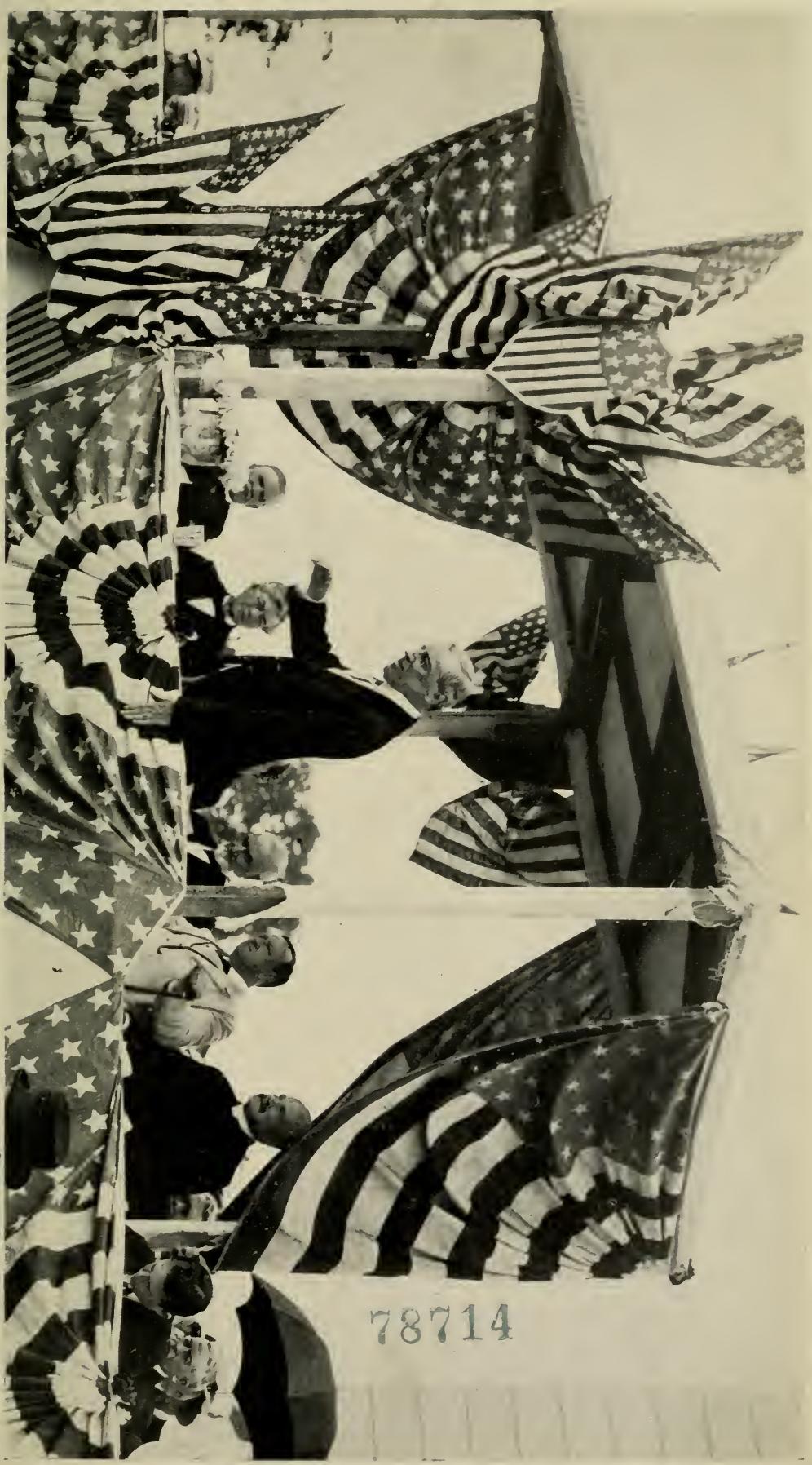
*Entered as second-class matter February 27, 1904  
at the Post Office at Washington, D. C.  
under Act of July 16, 1894*



L  
LD  
131  
A8/A8  
1914-24

**EXCERPT FROM PRESIDENT WILSON'S OPENING-DAY  
ADDRESS.**

We are here setting up on this hill as upon a high pedestal once more the compass of human life with its great needle pointing steadily at the lodestar of the human spirit. Let men who wish to know come and look upon this compass and thereafter determine which way they will go.—*Woodrow Wilson.*



PRESIDENT WILSON SPEAKING - OPENING DAY, MAY 25, 1914

8406 MAY  
S.S.P.A.



## CONTENTS.

---

	PAGE
Calendar .....	5
Board of Trustees.....	6
Officers of Administration and Instruction.....	7
Committee of Conference and Co-operation' .....	8
Woman's Guild of the American University.....	8
Register of Students.....	9
Historical Sketch .....	11
Board of Award.....	13
Research Work at Washington.....	14
Lectureships . . . . .	15
Fellowships . . . . .	16
Matriculation of Students.....	19
Living Expenses .....	19
Degrees . . . . .	19
University Convocation .....	20
University Publications .....	20
Mountford-Mamreov Museum .....	21
University Library .....	21
Solar Radiation Research.....	22
Courses in Philosophy.....	25
Research Course in the History of Religions.....	27
Graduate Study Courses at Home.....	31
Extension Work .....	32
History .....	32
Political Science and Diplomacy.....	33
Literature .....	34
Fine Arts and Music.....	34
Americana . . . . .	35
Internationalism and World Peace.....	36
Research Work in the Institutions of the National Government and in other Institutions at Washington.....	37
Libraries at Washington.....	37
Department of State—	38
Bureau of Indexes and Archives—Bureau of Rolls and Library....	38

	PAGE
Treasury Department—	39
Public Health and Marine Hospital Service.....	39
Department of War—	39
Surgeon-General's Office—Offices of Chief of Staff—Bureau of Insular Affairs .....	39
Department of the Navy—	40
Hydrographic Office—Naval Observatory—Naval Medical School— Library and Naval War Office.....	40
Department of the Interior—	41
Patent Office—Bureau of Education—Geological Survey—Bureau of Mines .....	41
Department of Agriculture—	43
Weather Bureau—Animal Pathology and Hygiene—Bureau of Plant Industry—Forest Service—Bureau of Chemistry—Bureau of Soils—Bureau of Entomology—Bureau of Biological Sur- vey—Office of Experiment Stations—Office of Public Roads.....	43
Department of Commerce—	45
Bureau of the Census—Bureau of Foreign and Domestic Com- merce—Bureau of Standards—Bureau of Fisheries—Coast and Geodetic Survey .....	45
Department of Labor—	47
Bureau of Labor Statistics—Children's Bureau.....	47
The Smithsonian Institution.....	48
Pan-American Union .....	50
Interstate Commerce Commission.....	51
United States Botanic Garden.....	52
Civil Service Commission.....	52
Columbia Institution for the Deaf.....	52
Government Hospital for the Insane.....	52
Corcoran Gallery of Art.....	53
The Volta Bureau.....	53
The National Geographic Society.....	54
Carnegie Endowment for International Peace.....	54

## CALENDAR, 1914-1916.

1914.

Wednesday, May 27—Opening Day.

Thursday, May 28-Monday, October 5—Summer Recess.

Tuesday, October 6—First Semester begins.

Thursday, November 26—Thanksgiving Day. Work suspended.

Tuesday, December 22—Christmas Recess begins.

Friday, December 25—Christmas Day.

1915.

Tuesday, January 5—Second Semester begins.

Monday, February 22—Washington's Birthday. Work suspended.

Tuesday, March 30—Easter Recess begins.

Sunday, April 4—Easter Day.

Tuesday, April 6—Work resumed.

Wednesday, May 26—Convocation Day.

Thursday, May 27-Monday, October 4—Summer Recess.

Tuesday, October 5—First Semester begins.

Thursday, November 30—Thanksgiving Day. Work suspended.

Thursday, December 23—Christmas Recess begins.

Saturday, December 25—Christmas Day.

1916.

Tuesday, January 4—Second Semester begins.

Tuesday, February 22—Washington's Birthday. Work suspended.

Tuesday, April 18—Easter Recess begins.

Sunday, April 23—Easter Day.

Tuesday, April 25—Work resumed.

Wednesday, May 31—Convocation Day.

## OFFICERS OF THE BOARD OF TRUSTEES.

President, BENJAMIN F. LEIGHTON.  
Vice-President, ROBERT B. WARD.  
Treasurer, CHARLES C. GLOVER.  
Secretary, CHARLES W. BALDWIN.

## BOARD OF TRUSTEES.

### Class of 1915.

THOS. H. ANDERSON, D. C.  
JOHN E. ANDRUS, N. Y.  
CALVERT CRARY, Mass.  
CHARLES DICK, O.  
ARTHUR DIXON, Ill.  
H. O. S. HEISTAND, U. S. A., O.  
BENJAMIN F. LEIGHTON, D. C.  
LEVI SMITH, Pa.

THOMAS W. SMITH, D. C.  
GEO. W. F. SWARTZELL, D. C.  
JOHN H. VINCENT, Ill.  
ROBERT B. WARD, N. Y.  
GEO. F. WASHBURN, Mass.  
WILLIAM R. WEDDERSPON, D. C.  
WILLIAM R. WOODCOCK, Pa.

### Class of 1919.

WILLIAM J. BRYAN, Nebr.  
JOSEPHUS DANIELS, N. C.  
CHARLES W. FAIRBANKS, Ind.  
WILLIAM T. GALLIHER, D. C.  
CHARLES C. GLOVER, D. C.  
CHARLES L. GOODELL, N. Y.  
JOHN W. HAMILTON, Mass.

JAMES C. NICHOLSON, Md.  
CLARENCE F. NORMENT, D. C.  
JOHN A. PATTEN, Tenn.  
WILLIAM S. PILLING, Pa.  
SAMUEL R. VAN SANT, Minn.  
BRAINERD H. WARNER, D. C.  
LUTHER B. WILSON, N. Y.

### Class of 1923.

CHARLES W. BALDWIN, Md.  
JOSEPH F. BERRY, Pa.  
JABEZ G. BICKERTON, Pa.  
JULIAN S. CARR, N. C.  
WILLIAM S. CORBY, D. C.  
EARL CRANSTON, D. C.  
FRANKLIN HAMILTON, Mass.

MRS. JOHN F. KEATOR, Pa.  
ABRAHAM J. PALMER, N. Y.  
MRS. J. FRANK ROBINSON, Ill.  
THEODORE ROOSEVELT, N. Y.  
GEORGE C. STURGISS, W. Va.  
ALPHAEUS W. WILSON, Md.

## OFFICERS OF ADMINISTRATION AND INSTRUCTION.

FRANKLIN HAMILTON, A.B., S.T.B., Ph.D.,  
Chancellor and ex-officio member of the Board of Award.

ALPHAEUS WATERS WILSON, A.B., S.T.D., LL.D.,  
Vice-Chancellor.

ALBERT OSBORN, A.B., B.D.,  
Registrar and Ex-officio Member of the Board of Award.

FRANK WILBUR COLLIER, A.B., S.T.B., Ph.D.,  
Director of Research and ex-officio member of the Board of Award.

WILLIAM JENNINGS BRYAN, A.B., M.A., LL.B., LL.D.,  
Member of the Board of Award.

THOMAS NIXON CARVER, A.B., Ph.D., LL.D.,  
Member of the Board of Award.

PHILANDER PRIESLEY CLAXTON, A.B., M.A., Litt.D., LL.D.,  
Member of the Board of Award.

JOSEPHUS DANIELS, Litt.D., LL.D.,  
Member of the Board of Award.

JOHN WILLIAM HANCHER, B.S., M.S., M.A., S.T.D.,  
Member of the Board of Award.

ALFRED CHARLES TRUE, M.A., Sc.D.,  
Member of the Board of Award.

WILLIAM ANDREW WOOD, A.B., S.T.B., S.T.D.,  
Member of the Board of Award.

ISMAR JOHN PERITZ, A.B., Ph.D.,  
Lecturer on the Bible, 1915.

JUSTICE THOMAS H. ANDERSON,  
Lecturer on American Diplomacy.

FREDERIC MAURICE STONE, A.B., B.D., D.D.,  
Endowment Secretary.

HERBERT HARVEY KIMBALL, A.B., Ph.D.,  
In charge of Solar Radiation Research, United States Weather Bureau.

IRVING FORREST HAND,  
Assistant in Solar Radiation Research.

BENJAMIN MINGE DUGGAR, B.S., M.S., A.B., M.A., Ph.D.,  
Counseling Professor in Plant Physiology.

OSWALD SCHREINER, B.S., M.S., Ph.D.,  
Counseling Professor in Chemistry.

MITCHELL CARROL, A.B., M.A., Ph.D.,  
Counseling Professor in Archaeology and Art.

GEORGE S. DUNCAN, A.B., M.A., B.D., Ph.D.,  
Counseling Professor of Oriental Languages and Literatures.

JOHN FRANKLIN ST. CLAIR, A.B., D.D.,  
Financial Secretary.

JOHN BEAVER POLSGROVE, A.B., D.D.,  
Field Secretary.

GERVASE ARISTARCHUS VIETS,  
Financial Secretary.

JOHN BROOKS HAMMOND,  
Superintendent of Grounds and Buildings.

CLARENCE GREGG TORREYSON,  
Superintendent's Assistant.

## COMMITTEE OF CONFERENCE AND CO-OPERATION.

### Board of Education.

WILLIAM FRASER McDOWELL, A.B., S.T.B., S.T.D., LL.D.  
THOMAS NICHOLSON, A.B., S.T.D., LL.D.  
MARCUS DARIUS BUELL, A.B., S.T.B., S.T.D.

### The Educational Association.

ALFRED EDWIN CRAIG, A.B., D.D.  
ARTHUR LOUIS BRESLICH, A.B., Ph.D.  
ABRAM WINEGARDNER HARRIS, A.B., Sc.D., LL.D.

### University Senate.

JAMES ROSCOE DAY, A.B., D.D., D.C.L., LL.D.  
SAMUEL PLANTZ, A.B., S.T.B., D.D., LL.D.  
EDWIN ALLISON SCHELL, A.B., D.D., Ph.D.

## WOMAN'S GUILD OF THE AMERICAN UNIVERSITY.

### Officers.

Vice-President and Acting President,  
MRS. THOMAS H. ANDERSON.

Recording Secretary,  
MISS ELIZABETH F. PIERCE.

Corresponding Secretary,  
MRS. FREDERICK PLINY LILLEY.

Treasurer,  
MRS. WILLIAM M. HANNAY.

### Vice-Presidents,

MRS. JOHN A. LOGAN,	MRS. ALDIS B. BROWNE,
MRS. BENJAMIN F. LEIGHTON,	MRS. JONATHAN P. DOLLIVER,
MRS. T. DeWITT TALMAGE,	MISS MARGARET GAY DOLLIVER,
MRS. ANDREW B. DUVALL,	MRS. M. A. HEPBURN,
MRS. JOHN HOEFFECKER,	MRS. CHARLES P. McLANE,
MRS. J. B. SHOWALTER,	MISS IDA SIMPSON,
MRS. M. B. TULLOCH,	MRS. GEORGE C. WILDER.

The Woman's Guild of the American University has its headquarters at Washington, D. C. The object of this guild is to form an organized center for the united thought and action of the women of the country to promote the interests of the American University. Their plan is to create opportunities for gathering money and concentrating gifts for building and endowing the university. Their moving purpose is if possible to raise an endowment fund for the support of a College of Comparative Religion. Having this as a specific object in mind, they desire, however, in every way to aid in upbuilding the general endow-

ment funds of the university. Employing personal efforts and community meetings they will strive to enroll as helpers of the university women anywhere who are interested in forwarding the purposes and work of the American University. Any person contributing \$1,000 becomes an honorary vice-president; \$500 a charter member, and \$100 a life member of the guild.

The work of the guild consists primarily in fostering the ideals of the university and building up a constituency that shall strengthen its life and resources. To this end the plan is to enlist a nation-wide league of the Christian women of America devoted to this work. The insignia of the guild is a gold cross enfolded by the American flag and bearing on it in blue enamel the inscription, "The American University Woman's Guild."

#### REGISTER OF STUDENTS.

##### Candidates for Graduate Degrees.

BAILEY E. BROWN..... Washington, D. C.

A.B. and M.A., University of Alabama.  
Member American Chemical Society.  
American Society of Agronomy.

JAMES D. BUHRER..... Washington, D. C.

A.B., Calvin College.

J. S. CAUS..... Washington, D. C.

A.B. and M.A., North Carolina College of Agriculture and Mechanic Arts.  
Editor in Chief, Southern Planter, 1912-1914.  
Member American Association for the Promotion of Agricultural Science.

L. MORGAN CHAMBERS..... Washington, D. C.

A.B., Johns Hopkins University.

HOWARD TAYLOR ENNIS..... Lewes, Del.

A.B., Delaware State College.

JOHN R. ESSAIAS..... Washington, D. C.

A.B., Ohio Northern University.  
S.T.B., Boston University School of Theology.

I. WITMAN HUNTZBERGER..... Friendship Heights, Md.

A.B. and M.A., Lebanon Valley College.

WILMER P. JOHNSTON..... Washington, D. C.

A.B., Randolph-Macon College.  
B.D., Vanderbilt University.

ELBERT C. LATHROP.....	Washington, D. C.
A.B., DePauw University.	
Member American Chemical Society.	
Member American Agronomy Society.	
Member American Association for Advancement of Science.	
Awarded medal of merit by Franklin Institution of Philadelphia, 1911.	
EDITH B. LOWE.....	Washington, D. C.
A.B. and M.A., George Washington University, Washington, D. C.	
HENRY FREY LUTZ.....	Washington, D. C.
A.B., Hiram College.	
B. D. Oberlin Theological Seminary.	
HARRY M. MILLER.....	Washington, D. C.
B.S., Hanover College.	
M.S., George Washington University.	
FRANCIS M. MCCOY.....	Washington, D. C.
A.B., Ohio Wesleyan University.	
S.T.B., Boston University School of Theology.	
FREDERICO PALLADINO.....	Bangor, Me.
A.B., University of Maine.	
B.D., Drew Theological Seminary.	
NANETTE B. PAUL.....	Washington, D. C.
LL.B., Washington College of Law.	
JOSHUA J. SKINNER.....	Washington, D. C.
B.S. and M.S., University of North Carolina.	
Member American Chemical Society.	
Member American Agronomy Society.	
ALIDA SMITH.....	Washington, D. C.
A.B., Simpson College.	
M.A., University of Michigan.	
DAVID OSCAR SMITH.....	Washington, D. C.
A.B. and M.D., University of Michigan.	
GEORGE LEROY WHITE.....	Anacostia, D. C.
A.B., Western Maryland College.	
B.D., Drew Theological Seminary.	
Special.	
JOHN BRITTAN CLARK.....	Washington, D. C.
A.B., Amherst College.	
B.D., Union Theological Seminary.	
D.D. (Hon.), Alma College.	
IRENE WOODBRIDGE CLARK.....	Washington, D. C.
CELENA W. FRIZZELL.....	Washington, D. C.
JOHN E. FORT.....	Laytonsville, Md.
WM. L. HOFFMAN.....	Ballston, Va.
MILLARD F. LOWE.....	Hyattsville, Md.
DANIEL HARWOOD MARTIN.....	Washington, D. C.
D.D., St. John's College.	
HOWARD C. OWENS.....	Clinton, Md.
ELMER M. RAMSEY.....	Washington, D. C.

**HISTORICAL SKETCH.**

Not long before the civil war, in writing for the Harpers, William Arthur, author of *The Tongue of Fire*, advocated the establishment of an institution of the higher learning at Washington by American Methodists. Matthew Simpson, during his early residence as bishop in Philadelphia, voiced his conviction of the same duty. Alfred Wheeler, from his editorial chair of the *Pittsburgh Christian Advocate*, ably seconded the proposition. Edward R. Ames, while bishop in Baltimore, and John P. Newman, during his pastorates of Metropolitan Church in Washington, uttered strong words to the same effect.

John Fletcher Hurst soon after removing his episcopal residence from Buffalo to Washington was appealed to by several leading educators in behalf of such an institution, and on Christmas Day, 1889, began a search for a site. This search continued for three weeks, and was rewarded by the discovery of a location suited to a university and in the market for sale. It was a beautiful and diversified piece of ground, ninety-two acres in extent, located on Loughboro Road, in the Northwest Heights of Washington, and commanded a panoramic view over the District, the Manassas Plains, and the Blue Ridge Mountains of Virginia, the Harper's Ferry Notch, and Sugar Loaf Mountain of Western Maryland. The price was \$100,000. An option of \$1,000 was paid on January 25, 1890, and \$19,000 was paid on March 1, completing the first of five equal installments. These subsequent installments were paid at various dates, and the final payment was made in March, 1895, when Bishop Hurst, who had assumed the financial burden, transferred the title to the trustees.

Historic interest attaches to the site from two sources: The property was once owned by Thomas Addison, a cousin of Joseph Addison of *Spectator* fame, and on its northern border stands a conspicuous portion of Fort Gaines, thrown up by the Pennsylvania Reserves during the early sixties.

The organization of the corporation under a charter from the District of Columbia took place on May 28, 1891, in the

southeast wing or annex of the Arlington Hotel (now torn down), the part once occupied by Charles Sumner as his residence. Thirty-six trustees were elected. Bishop Hurst was elected chancellor, Charles W. Baldwin secretary, and Albert Osborn registrar. William W. Smith was elected vice-chancellor on March 31, 1892, and George W. Gray general secretary on July 7, 1892, and each served one year. Samuel L. Beiler was elected vice-chancellor May 24, 1893, and served for five years. William W. Martin was elected secretary on May 25, 1898, and served for a little more than a year. Wilbur L. Davidson, who had been field secretary for a year, was elected secretary in 1899, and served until 1908.

A new and enlarged charter was obtained from the Congress and approved by President Harrison, February 24, 1893, and under this charter the Board of Trustees was reorganized on December 13, 1893.

The General Conference of the Methodist Episcopal Church in 1892, and that of the Methodist Episcopal Church, South, in 1894, gave endorsement to the enterprise.

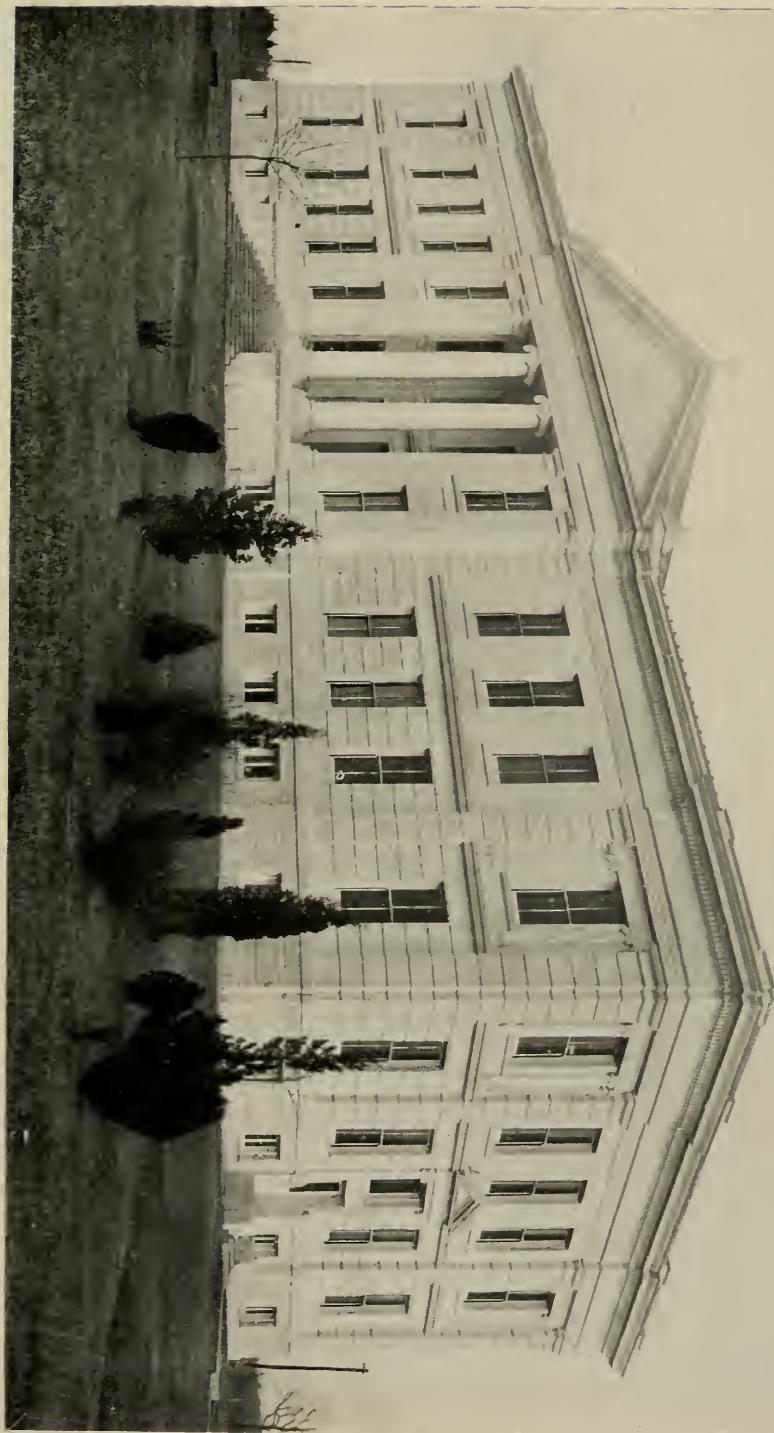
The first building, the College of History, for which subscriptions were started in January, 1895, and increased to \$150,000 by May in the same year, was begun in June, 1896, and completed in January, 1898. It is 176 feet long, the central portion 90 feet broad, and the two ends 70 feet. It is of tool-dressed marble. Its cost was \$186,000. It contains forty-two rooms.

The foundation of the second building, the College of Government, was begun in 1901; the corner-stone was laid on May 14, 1902, and the superstructure, which is of Vermont marble, was completed to the roof in 1907, at a total cost of \$155,000. The interior work, not yet done, will require about \$150,000. Two more buildings are in near prospect.

On the failure of his strength in 1902, Bishop Hurst was made chancellor emeritus, and Bishop Charles C. McCabe, who had been vice-chancellor since 1899, was elected chancellor, and held the office until his death in 1906. Bishop Alphaeus W. Wilson was elected vice-chancellor in 1902.

Franklin Hamilton was elected chancellor in May, 1907. A

COLLEGE OF HISTORY - AMERICAN UNIVERSITY





working plan for the beginning of the academic functions of the university was presented by Chancellor Hamilton and adopted in substance by the trustees on December 11, 1912, and in revised form on May 14, 1913. Approval of this working plan has been given by the Board of Education, the Educational Association, and the University Senate of the Methodist Episcopal Church, and a joint committee of conference and co-operation has been appointed by these three educational bodies.

The election of a Board of Award and of a director of research took place March 25, 1914.

On May 27, 1914, the university was opened officially by the President of the United States, and a program of addresses by President Woodrow Wilson, by Secretaries Bryan and Daniels, and by Bishops Cranston, McDowell, and Hamilton, of prayer by Bishop Harding, and music led by the United States Marine Band, was carried through on the campus in the presence of a large assembly.

The first classes for work met in the College of History on October 6, 1914, under the conduct of Doctor Frank W. Collier, director of research.

#### **BOARD OF AWARD.**

The Board of Award consists of ten members. This board has authority to employ the temporary services of approved scholars and advisers in order the better to fulfill the appointed functions of the board. The board orders its own procedure and meetings.

The Board of Award, on nomination by some scientific school, college or university, concurred in by the officers of the American University, will select the fellows of the university. In fulfilling this duty the board will take into account the general qualifications of each candidate, his preparation and health, his powers of leadership and promise of highest service, as well as his scholastic standing. The board has authority to order such special examination of candidates for selection to fellowships as it may prescribe.

It also will have oversight of the courses of study to be pur-

sued by candidates for degrees or by other students who may engage in a special research.

The board will pass upon the qualifications of any student who is a candidate for a degree from the university. The board will pass also upon any other proposed academic distinction that is to be granted.

#### RESEARCH WORK AT WASHINGTON.

Dr. Frank W. Collier, Director.

In the year 1892 the Fifty-second Congress passed a joint resolution "to encourage the establishment and endowment of institutions of learning at the national capital by defining the policy of the Government with reference to the use of its literary and scientific collections by students."

On March 3, 1901, a supplementary resolution was passed by Congress. This second resolution provided that facilities for study and research in the government departments, the Library of Congress, the National Museum, the Zoological Park, the Bureau of Ethnology, the Fish Commission, the Botanic Gardens, and similar institutions hereafter established shall be afforded to scientific investigators and to duly qualified individuals, students, and graduates of institutions of learning in the several States and Territories, as well as in the District of Columbia, under such rules and restrictions as the heads of the departments and bureaus mentioned may prescribe.

To utilize the wealth of educational material thus thrown open to the use of students is the first aim of the university. This will be done through the medium of an institute for research to be operated in connection with the government departments and bureaus while yet being a component function in the life of the American University. This institute is not intended to carry on research work of its own. Rather is it simply a *nexus* or connecting link, by means of which students may be introduced to the opportunities for research now existing in the government departments. It is designed to make available what already exists, but is not being put to its maximum educational use. This institute has a director of research. He will have a thorough knowledge of the opportunities for research in the

government offices. The primary function, therefore, of the director of research is to open the door to those channels of new discovery and scientific suggestion which exist under government auspices. The government departments number fifty. They are catalogued for service in this publication at page 37. Some are especially rich in opportunity; others, as yet, present less field for the work of the investigator.

These departments are listed in the order of their organization by the national Government. The opportunities for work in each department will be, of course, subject to the rules and regulations of that department. The work there undertaken must be in accordance with the plan and desires of the department heads for the utilization of their resources.

The student who has matriculated with the American University will be furnished with an identification card, and will act under the advice of the university's director of research, who will be in consultation with the heads of the departments.

Under the heading of each department as they are catalogued is set down a suggested field of study and investigation. All prospective students looking to the government departments as a medium of work should communicate with the university director of research, Dr. Collier. The university cannot be responsible for any student who is not enrolled by its registrar and does not act under the supervision of the director of research. In order that the heads of the government departments may not be burdened by inquiries occasioned by the university plans, students or those seeking information concerning such plans will address Dr. Collier, American University, Washington, D. C.

The work of the institute for research is supported by the David Henry Carroll Endowment Fund.

### LECTURESHIPS.

There will be provided courses of lectures by specialists that will "assist in vitalizing the truth that has once been discovered." The lecturers will be invited to discuss themes that will exercise the highest influence for scholarship and the advancement of

human knowledge. These lectures will not all be confined to Washington. The lecturers will be sent to such points as will offer the largest opportunity and the most fruitful field for the message.

The purpose is to publish such of the lectures as may deserve permanent form. The university thus will help to make a literature which "in ample and steady stream shall refresh the life of the Republic and the world."

The first established lectureship is the Bishop John William Hamilton Lectureship on Christian Evidences.

The income from the Patrick Clendenen Fund, and that of the John H. and Anna B. Donovan Foundation also will be used for the support of lectures.

Other lectures and public addresses will be given at the university buildings. These will be of such character as the director of research from time to time may deem helpful in assisting the work of those students who in residence at the university are carrying on special investigation.

#### **Lectures on the Bible.**

It is purposed by the university each year to have public lectures on the Bible of the distinction and character of the series given in 1915 by Professor Peritz, of Syracuse University, on The Making of Our English Bible. These were on the following subjects: The Ancient Manuscripts and Ancient Translations of the Bible, The Beginnings of the English Bible, The Bibles of the Reformation, and The King James Bible and the Revised Versions. Each lecture was illustrated profusely with stereopticon views and gave great satisfaction.

#### **FELLOWSHIPS.**

The policy of distributed efficiency is one of the vital elements of the university. This policy is put into operation through the medium of university fellowships. This plan of fellowships will afford opportunities for covering the whole field of knowledge, and thus will complete the scheme of university study beyond what is afforded at Washington.

So far as practicable such fellowships will be established and

supported from the university funds. To students who thus are granted fellowships there will be opened at once the highest academic opportunities; for a fellowship will enable a student to pursue work at the institution and in the environment which for his purpose shall offer the largest possible advantages.

#### **Fellowships of Two Classes.**

(A) Fellows who pursue their studies at seats of learning or at places of study and investigation within the United States. A fellow of Class A shall receive a stipend of \$600 per annum.

(B) Fellows who pursue studies at foreign seats of learning or at places of study and investigation abroad. A fellow of Class B shall receive a stipend of \$800 per annum.

#### **Admission to Fellowships.**

Students shall be admitted to fellowships upon the nomination of the school, college or university from which the candidate holds a baccalaureate or higher university degree. The nomination, however, is subject to confirmation by the officers of the American University and by the Board of Award.

#### **Tenure of Fellowships.**

Appointment to a fellowship shall be for one year, subject to renewal for a second year. In special cases a fellowship may be held for a third year, but no longer. The officers of the American University shall decide upon the length of the term of each fellow.

#### **The Work of a Fellow.**

A fellow shall pursue study in such subject or subjects and at such seats of learning or at such places as shall be recommended by his nominating school, college or university, subject to the approval of the officers of the American University. During the pursuit of such study the student shall be classified as a fellow of the American University, and he must make a semi-annual report to the authorities of the American University concerning his work. Where the study is made under the auspices of some other academic institution each report from the fellow shall be accompanied by an official statement from that institu-

tion. The second semi-annual report must be in the hands of the officers of the American University thirty days before the date of the University Convocation.

#### **Application for Fellowships.**

Candidates for fellowships in the university will apply to the registrar, Mr. Osborn, for application blanks. These blanks when made out must receive the endorsement of the institution which granted the candidate his or her baccalaureate or other subsequent degree. The fact that the same institution thus may be called upon to endorse the application of several of its alumni in no case will militate against any applicant, since the final choice of the fellow is made by the Board of Award of the American University.

It is also to be borne in mind that, since actual rank in the classes of the institution which recommends the candidate will not decide the final selection of a fellow, any additional fact or information concerning the candidate that bears on such selection is desired by the Board of Award. Such information might be classed under the heads: health, life-plan, character, qualities for leadership, personal initiative, etc. Such information may be furnished by reputable persons best acquainted with the candidate.

After the blanks have been filled out in accordance with the printed directions they are to be forwarded to the registrar of the American University. They then will be transmitted to the Board of Award, who will take final action upon them. If desired by the Board of Award the candidate must be prepared to appear before the board to answer any inquiries or to meet such tests as the board may order.

#### **Gustavus F. Swift Fellowship.**

Through the generous gift of Mrs. Gustavus F. Swift there has been endowed a fellowship in memory of her husband, the late Mr. Gustavus F. Swift, of Chicago, Ill. This fellowship will afford an estimated income of about seven hundred and fifty dollars each year. The incumbent of the fellowship is to be a graduate of Garrett Biblical Institute.

**STUDENTS.**

To be admitted to matriculation a student must have received a regular academic degree such as is conferred by colleges, universities and scientific schools of recognized standing in this country. This does not apply to special students.

The matriculation fee is five dollars, payable to the registrar at the time of enrolment. No fixed tuition fees are charged. The matriculation day is the first Wednesday in October.

**LIVING EXPENSES.**

The university, as yet, has no dormitories. But in the vicinity of the libraries and museums of the city comfortable homes can be found in boarding houses or with families. Board can be secured for three dollars and a half a week upward; rooms for a dollar and a half a week upward.

**DEGREES.**

A candidate for a degree shall give evidence to the Board of Award that he is worthy of such degree. He shall present a thesis which shall be satisfactory to the Board of Award. This thesis, the university, in its discretion, shall have the right to publish. All legal ownership in the thesis shall inhere in the university.

No Bachelor's degree will be granted. But opportunities for attaining other degrees will be open to all properly accredited students by permission of the Board of Award and under their supervision.

**REQUIREMENTS FOR DEGREES.****Master of Arts.**

The ordinary requirements for the degree of Master of Arts are that the candidate shall hold the Bachelor degree from an approved college, that he shall pursue advanced studies for at least one year, and that he shall present a thesis which will show that his work has been completed with distinction.

**Doctor of Philosophy.**

The candidate must hold the Bachelor degree from an approved college, must select a special branch of learning and de-

vote at least three years to study and research in it, and present a thesis which will reveal ability to do independent research work with the end in view of making a contribution to the advancement of knowledge. The length of time is wholly secondary, the primary thing being the quality of the work. In estimating the amount of study for this degree the work done by the candidate after receiving his Bachelor's degree will be taken into account.

#### **Other Degrees.**

Other degrees as authorized will be granted on a similar basis of work and time given by the candidates to the specific subject and field in which a Master's degree or a doctorate may be desired.

#### **UNIVERSITY CONVOCATION.**

On the last Wednesday of each calendar month of May is held the Convocation of the American University. This public function comprehends:

(a) A Convocation of the fellows of the American University. In this Convocation the fellows shall deliver addresses on subjects of importance worthy of publication. These addresses the university, in its discretion, shall have the right to publish. All legal ownership in each address shall inhere in the American University.

(b) There will be presented a report from the Institute of Research by the director, giving a statement of what has been done and what results have been accomplished which are of interest to the advancement of human knowledge.

(c) There will be conferred such degrees or such other academic distinctions as have been authorized by the Board of Award. There also shall be announced the appointments to fellowships for the ensuing year.

#### **UNIVERSITY PUBLICATIONS.**

From time to time the university will publish such theses and lectures given under its auspices as will serve to create a body of good literature. These publications will constitute a permanent contribution by the university to the field of knowledge.

They will seek to cover fields where new and stimulating work is being undertaken.

### **MOUNTFORD-MAMREOV MUSEUM**

#### **Illustrating Bible Life and Customs.**

Mme. Lydia Von Finkelstein Mountford has founded and is enlarging a museum of objects illustrating Bible life and customs. This museum is in the College of History and is open to the public. It will be found especially helpful for students of Bible history. This valuable auxiliary of the university bears the name of the Lydia M. von Finkelstein Mountford and Peter von Finkelstein Mamreov Museum, illustrating Bible Life and Customs. It represents the life collection of Mr. Peter Mamreov, a well-known traveler and lecturer on oriental subjects, who had unusual opportunities for judicious selection of articles which illustrate this special field. Upon the death of Mr. Mamreov, his sister, Madame Mountford, continued the collection. She has placed it in the College of History as a permanent loan, and upon her death it is to become the property of the university. Madame Mountford, who throughout the land is known as a graphic portrayer of Palestinian customs, both modern and ancient, frequently gives descriptive and illuminating explanations of the collection to an increasing number of visitors.

### **UNIVERSITY LIBRARY.**

The university library at present is in the building of the College of History. It consists of twenty thousand volumes and twenty-five thousand pamphlets. Among these is a rare collection of Bibles. There is also good material in Americana and Wesleyana. Among the larger groups of books are the working libraries of the late Dr. Henry M. Harman of Dickinson College, Dr. Lewis R. Dunn of the Newark Conference, Professor Alfred Higbie of the University of Southern California, and Judge Wm. M. Springer. Additional collections of value are known to be on the way to increase the usefulness and efficiency of this working library as a student's help.

**SOLAR RADIATION RESEARCH.**

(In cooperation with the U. S. Weather Bureau.)

**Herbert H. Kimball, Ph. D., Professor of Meteorology, U. S. Weather Bureau, in charge; Irving F. Hand, Assistant.**

This research has for its object the measurement of the solar radiation received at the surface of the earth, either directly or as diffuse sky radiation, the development and improvement of apparatus employed in such measurements, and the study of the relation of solar radiation to plant and animal life.

One of the four observatories maintained by the Weather Bureau for measuring solar radiation is located in the College of History of this university, which affords exceptionally good exposures for the apparatus employed. By means of automatic instruments continuous records are obtained of the quantity of heat received on a horizontal surface from the sun and sky. With clear sky conditions measurements are made of the intensity of direct solar radiation on a surface normal to the direction of incidence of the solar rays. From these two measurements it is possible to compute the quantity of heat received on a horizontal surface from the sky alone.

The percentage of polarization of skylight, and the rate at which heat is radiated from a blackened surface to the sky at night, are also measured. Both of these, as well as solar radiation, are dependent upon the transparency of the atmosphere, and the three are therefore related.

The study of solar radiation is of fundamental importance to meteorologists, since all atmospheric movements, and in consequence all weather changes, as well as the purely solar climatic variations, are dependent upon the heat received from the sun.

**The Variations in the Intensity of the Heat Rays from the Sun with  
the Season of the Year.**

HERBERT H. KIMBALL.

Measurements of solar radiation intensities were commenced at the American University on October 21, 1914. They are a continuation of similar measurements that were made by the Weather Bureau at Mount Weather, Va., from September, 1907, to September, 1914, inclusive, and

at the Central Office of the Weather Bureau in Washington, from December, 1905, to April, 1912.

The rate at which heat is received at the outer limit of the earth's atmosphere with the earth at its mean distance from the sun is called the *solar constant* of radiation. Investigations by the Smithsonian Institution indicate that this rate is such that the heat received in one minute on one square centimeter of surface normal to the direction of the incident solar rays would raise the temperature of 1.92 grammes of water one degree centigrade. The heat required to raise the temperature of one gramme of water one degree centigrade is called a gramme-calorie. The solar constant of radiation is therefore 1.92 gramme-calories of heat per minute per square centimeter of normal surface. There is evidence that this so-called constant varies by a few per cent from time to time, and the value here given is its mean value.

When we measure the rate at which radiation is received at the surface of the earth we find great variations from day to day and from hour to hour of the same day. The principal cause of these variations is the absorption and scattering of the sun's rays by the earth's atmosphere. The longer the path of the rays through the atmosphere the more they are absorbed. This path varies very nearly as the secant of the sun's zenith distance. If we let this path equal 1 when the sun is in the zenith, it will equal 2 when the sun is  $60^\circ$  from the zenith, 3 when the sun is  $71^\circ$  from the zenith, and 6 when it is  $81^\circ$  from the zenith. It follows that the maximum radiation of the day will occur about noon.

In the northern hemisphere one might expect the maximum radiation of the year to occur at the time of the summer solstice, or about June 21, when the sun approaches nearest the zenith. This is not the case, however, as the data in the following table will show.

*Monthly Maximum Radiation Intensities that Have Been Measured at Washington, D. C., and Mount Weather, Va.:*

(Gramme-calories per minute per square centimeter of normal surface.)

Station.	Month.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
	Gr.- cal.												
Mount Weather, Va.—		1.37	1.48	1.48	1.45	1.50	1.47	1.49	1.45	1.50	1.48	1.43	1.40
Washington, D. C.—		1.42	1.43	1.43	1.49	1.44	1.40	1.47	1.40	1.43	1.45	1.48	1.48

The elevation of Mount Weather above sea level is 1,725 feet, while that of Washington is less than 100 feet. The readings at Mount Weather, therefore, average a little higher than those at Washington, on account of the diminished depth of the atmosphere at the former place. At neither station do the maximum readings for the year occur in June. At Wash-

ington the annual range is exceedingly small—from 1.40 calories in June and August to 1.49 calories in April, while on December 26, 1914, at the university, with an elevation of 418 feet above sea level, and with the sun at zenith distance  $62^{\circ}$ , or only  $28^{\circ}$  above the horizon, a radiation intensity of 1.48 calories was measured, which is within one per cent of the maximum for the year.

There are three principal causes that contribute to equalize summer and winter radiation intensities, as follows:

1. Early in July the earth is 1.034 times farther from the sun than it is early in January. Since radiation intensities vary inversely as the square of the distance from the source, the intensity of the solar radiation outside the earth's atmosphere early in January will be 1.069 times its intensity early in July.

2. Water vapor is an active absorber of solar radiation. The amount of water vapor the atmosphere can retain depends upon its temperature. In summer, in the vicinity of Washington, it contains more than twice the amount of moisture it does in winter. On the coldest days in winter it contains less than one-fifth what it does on the clearest days in summer. The depletion of the solar rays due to absorption by aqueous vapor is therefore much greater in summer than in winter.

3. Although dust particles absorb but a small amount of radiation, they act as minute mirrors to reflect or scatter a considerable percentage of it. This has been repeatedly noticed after volcanic eruptions, when the smoke or dust cloud that may envelop an entire hemisphere has reduced solar radiation intensities as much as 10 or 15 per cent for a period of several months. There is always more or less dust carried into the atmosphere by convection currents in summer, and comparatively little in winter, particularly when the ground is covered with snow.

The above three factors, therefore, earth's solar distance, atmospheric moisture, and atmospheric dust, all combine to reduce solar radiation intensities in summer. Why, then, are the summer months so much warmer than the winter months? The explanation is found partly in the greater number of hours of sunshine in summer, and partly in the fact that the atmosphere is warmed principally, not by the *solar* radiation that it absorbs, but by the heat it receives from the surface of the earth. The temperature of the earth's surface depends principally upon the amount of heat it receives from the sun, and the amount so received in any hour is proportional, not to the intensity of the solar radiation at normal incidence, but to the vertical component of that intensity.

At noon, on December 21, at Washington, the vertical intensity of the solar radiation is about 46 per cent, and on June 21 it is about 96 per cent of the intensity at normal incidence. These percentages, in connection with the radiation intensities tabulated above for Washington, give 0.68 and 1.34, respectively, for the maximum solar radiation intensities on a horizontal surface in June and December.

It is to be remembered that the table gives the maximum noon radiation intensities that have been measured. The proportionality of the mean noon intensities for Washington for the different months does not differ materially from that for the maximum rates, however.

The radiation measurements here considered have not taken into account the solar rays that are scattered by the earth's atmosphere, some of which find their way to the earth's surface as diffuse sky radiation. The consideration of this interesting factor in solar radiation investigations is reserved for another paper.

### **COURSES IN PHILOSOPHY.**

**Dr. Frank W. Collier, Instructor.**

The courses in philosophy are so arranged that the class-room work, which covers the principal problems in philosophy, may be covered in three years. The research should be done simultaneously, but the time element is not so important in this phase of the work as is the ability of the student to demonstrate that he is able to carry on independent investigation.

**Theory of Thought.**—The meaning and scope of Philosophy, the general nature and conditions of thought, perception, the significance of the categories, the notion, the judgment, inference, proof, explanation, structural fallacies, deduction and induction. Four hours weekly, first year, first half of first semester.

There will be class-room discussions and criticisms of the aforementioned problems as they are set forth in Bowne's Theory of Thought. Research work will be assigned to students. Individual work will be arranged for each student, and monthly papers will be presented to the instructor.

**Theory of Knowledge.**—Theoretical and practical possibility of Philosophical Scepticism, Realism and Idealism, Apriorism and Empiricism, the distinction between knowledge and belief. Four hours weekly, first year, second half of second semester.

The class-room work will consist of discussions and criticisms of the foregoing problems as outlined in Bowne's Theory of Knowledge. Research work will be assigned to students. Individual work will be arranged for each student, and monthly papers will be presented to the instructor.

**Metaphysics.**—The consideration of the aim and field of metaphysics will be followed with the investigation of the prob-

lems of (1) Ontology—Appearance and Reality, Being, the Nature of Things, Change and Identity, Causality, and the Nature of the World-Ground; (2) Cosmology—Space, Time, Motion, Matter, Force, and the Cosmic Mechanism; (3) Psychology—the Soul, the Relation of Soul and Body, Mental Mechanism, Freedom and Necessity. Four hours weekly, first year, entire second semester.

The class-room work will consist of discussions and criticisms of these problems as they are stated in Bowne's Metaphysics. Research work will be assigned for each student, and monthly papers will be presented to the instructor.

**Theism.**—Religion, its origin and rational ground, the unity, intelligence, and personality of the World-Ground; the metaphysical attributes of the World-Ground; the relation of God to the world; the ethical nature of the World-Ground; Theism and Practical Life. Four hours weekly, second year, first semester.

In the class-room there will be discussions and criticisms of these problems as they are expounded in Bowne's Theism, and independent research work will be required of each student. Individual work will be assigned, and monthly papers will be presented to the instructor.

**Ethics.**—The course will cover the fundamental ethical ideas, Good, Duty, and Virtue; the principal schools of Ethics, Egoism, Hedonism, Utilitarianism, Intuitionism, and Evolutionary Ethics, the Ethics of the Individual, of the Family, and of Society. Four hours weekly, second year, second semester.

The class-room work will consist of discussion and criticisms of these problems as outlined in some good work on Ethics. Independent research work will be required of students. Individual work will be assigned, and monthly papers will be presented to the instructor.

**History of Philosophy.**—The entire third year will be given to the history of Philosophy. Class-room work will consist of the discussion and criticism of the main problems of each philosophical system. Such works as Windelband's History of Philosophy will be followed with readings from the origi-

nal sources. Independent research work will be required of students, and individual work will be assigned, papers being presented to the instructor monthly.

**Ancient Philosophy.**—The development of philosophical ideas in the Oriental, Greek, and Roman schools.

**Mediaeval Philosophy.**—Patristic Philosophy, Scholasticism, the Jewish and Arabian Schools.

**Modern Philosophy.**—A careful survey of philosophical development from Bacon and Descartes to the present time.

#### RESEARCH COURSES IN THE HISTORY OF RELIGIONS.

Conducted by Dr. William Andrew Wood of the Board of Award.

1. An investigation into the nature of religion. Report work on assigned portions of Marett: "The Threshold of Religion." Spencer and Gillen: "Native Tribes of Central Australia." R. Otto: "Naturalism and Religion." Irving King: "Development of Religion." E. Caird: "The Evolution of Religion." William James: "The Will to Believe," "Varieties of Religious Experience." For those using German, Immanuel Kant: "Religion innerhalb der Grenzen blossen Vernunft." G. W. F. Hegel: "Philosophie der Religion."

(In every case the director of research will substitute any newer work that may appear that better covers the subject. No pains will be spared to keep the work of the department up to date.)

2. An investigation in general description of world-wide phenomena which men call religion. The aim will be to get in touch with all sources of information. The student will be directed in his consultation of the following, among others: Max Müller: "Introduction to the Science of Religion," "Natural Religion," "Anthropological Religion." A. Kuenen: "The Religious Systems of the World," "A History of Religion." F. B. Jevons: "Introduction to the History of Religion," "Introduction to the Study of Comparative Religion," "The Idea of God in Early Religion." C. P. Tiel: "Elements of the Science of Religion." J. K. Ingram: "Outline of the

History of Religion." L. H. Jordan: "Comparative Religion, Its Genesis and Growth." A. Lang: "The Making of Religion." A. Sutherland: "The Origin and Growth of the Moral Instinct." L. R. Farnell: "Evolution of Religion." C. R. Conder: "The Rise of Man." J. H. Moulton: "Religion and Religions." W. F. Warren: "The Religions of the World and the World-Religion." K. T. Preuss: "Ursprung der Religion und Kunst." J. Boehmer: "Religions-Urkunden der Verwandtes." H. Schneider: "Religion und Philosophie."

From time to time special investigations will be made in such subjects as Totemism, Exogamy, Taboo, the Sabbath among various nations, Magic, Divination, Folklore, Mythology, and other themes illustrative of the broad subject.

The student will be directed in the study of particular religions and groups of religions, such as the general Semitic Religions, Babylonian-Assyrian, Arabian, Egyptian, Hebrew, and Christian.

#### **The Religion of the Old Testament.**

Plans will be made to direct students who desire to do research work in the religion of the Old Testament. The purpose will be to secure (1) a knowledge of Hebrew history in all its periods, and of ancient history, especially Egyptian, Assyrio-Babylonian, Persian, and Greek, in its bearing upon the religion of the Old Testament; (2) an acquaintance with the chronological development of Old Testament literature in its various forms of legislation, prophecy, and wisdom; also a knowledge of the origin and growth of the canon, of the text, and of the principles of Old Testament interpretation; (3) a familiarity with the history of the Hebrew religion and the development of the theological ideas of the Hebrews; (4) some familiarity with the Rabbinical literature and a general acquaintance with New Testament literature, with special reference to the use made of the Old Testament in the New Testament.

Investigations will be made in subjects as the following: The Genesis Stories, The Work of the Hebrew Priests, The Work of the Hebrew Prophets, The Work of the Hebrew

Law-Givers, The Work of the Old Testament Sages, The Old Testament Poets, The Books of Kings and their Parallel Assyrian Records, The Book of Ezekiel and Its Historical Background—Condition of the Exiles, Babylonian Government, Ezekiel's Character-place of the Book in the Development of Old Testament Literature; Hebrew Institutions, Israel and the Neighboring Nations, The Hebrew Religion and Neighboring Faiths, The Moral Leaders of Israel, The Religion of Israel Prior to the Exile, The Religion of Israel After the Exile, The Hebrew Conception of Redemption, Old Testament Apocalyptic, Prophecy and the History of Prophecy—A study of prophecy upon the basis of a classification of the prophetic material according to (1) the historical periods, (2) the work of the prophet, (3) the principal ideas of prophecy.

#### **The Religion of the New Testament.**

Research work will be provided in the following lines of investigation :—

1. The Historical Environment of Early Christianity: the conditions in the Jewish nation and the Roman Empire at large amid which Jesus and his immediate followers did their work, the Christian Church came into being, and the early Christian literature as a product of the religious life and needs of the Christian community.
2. The Origin and History of the Literature of the New Testament and Early Christian Period, including (1) Jewish literature of approximately the New Testament period, (2) the books of the New Testament, considered with reference to their origin, authorship, date, purpose and plan, and (3) other ante-Nicene Christian literature.
3. The Documents of the New Testament Text, and the Theory and Praxis of Textual Criticism as applied to them.
4. The Interpretation of the New Testament, including principles of interpretation.
5. The Life of Jesus. A research into the sources. The attainment and presentation of a true conception of the life and teaching of Jesus.
6. The History of the Early Years of the Christian Church.

7. The Teaching of Jesus and Other Early Christian Teachers. Upon the basis of a knowledge of the life, especially the religious life, and thought of the period, the effort will be made to set forth in their genetic relations the ideas which constitute the central and governing elements of early Christianity.

#### **Special Subjects for Investigation.**

1. Jesus in Jewish History—The Jewish people in the Roman Empire; Geography, Population and Languages of Palestine; Influence of Hellenism; Political Events and Parties; Moral and Religious Ideas; Historical Relation of the Life and Teaching of Jesus.

2. The Greco-Roman World in the First Century—Social, Intellectual, and Religious Conditions and World Movements outside of Palestine in the New Testament Period, with special reference to the Expansion of Christianity.

3. Religions of the Greco-Roman World in the First Century—History of the Apostolic Age; Status of Christianity at the End of the First Century in the Greco-Roman World.

4. Early Christianity and the Hellenistic Religions. Contact of Christianity with Judaism and with Hellenism; the Influence of Jewish Thought, of Greek Philosophy, and of the Hellenistic Religions in the Development of Christianity; the Nature of early Christianity, and its Contribution to the Religious Life of the Period.

5. The Theology of the Synoptic Gospels. An Inductive Search of the Synoptic Gospels and their Sources, in relation to the Religious Life of the Period in which they arose, and of the Method of their Production, with a view to discovering the Theological Ideas of the several authors, and the Teaching of John the Baptizer and Jesus.

6. The Theology of the Johannine Writings. An Inductive Research of the Gospel and Epistles of John in the light of the conditions out of which they arose.

7. The Ethical Teaching of the New Testament.

8. The Eschatology of the New Testament; Rise and Development of Primitive-Christian Ideas in the First Century.

9. The Christology of the New Testament. A Study of the Rise of Primitive-Christian Ideas.
10. The Idea of Atonement in the New Testament.
11. The Idea of Authority in the New Testament. A study of the nature and basis of religious authority reflected in the several writers and groups of books in the New Testament.

#### **Research Work in Systematic Theology.**

1. An Investigation of the General Development of Christian Thought since New Testament Times. Investigation in Comparative Theology. Types of Contemporary Theology.
2. Christian Origins. The Formative Concepts of Christian Theology. Those derived from Judaism. Those derived from Greco-Roman Philosophy, especially from Stoicism, Platonism, and the Mysteries.
3. History of Dogma—The Patristic Period. The Scholastic Period. The Reformation Period. The Modern Period. The Development of Protestant Theology since Kant. A Survey of the Philosophical Modifications of Modern Theology due to the Influence of Kant, Schleirmacher, Hegel, and Ritschl.
4. The History of the Great Doctrines—The Doctrine of God; The Doctrine of Man—The Christian View of Man and Sin, Atonement, Salvation, Justification; The Person and Work of Christ; The Doctrine of Immortality; Fundamental Problems in Modern Theology—Christian Doctrine in relation to Modern Science, Modern Philosophical Ideals, Modern Social and Ethical Movements.

#### **GRADUATE STUDY COURSES AT HOME.**

These courses primarily are intended to put students into vital contact with the present-day developments in life and thought. They will be adapted especially to help those compelled to pursue study while still following their life vocations. In order the better to meet the varied needs of such students the studies will be carried on in three divisions:

**Division A.**—Graduates of colleges and professional schools. Courses of reading and investigation covering various fields will be mapped out for those who, although graduated from

college, and also from professional schools, desire to pursue farther work of a serious character in some chosen subject.

**Division B.**—Graduates of colleges who as yet have attended no professional school, but who desire help in the choice of books for study and research.

**Division C.**—Persons who, though not yet having received a collegiate degree, desire to follow a serious course of study over a period of years and wish help and direction in such work. This course will be particularly helpful to ministers who, though not graduates from college, have completed the courses of study prescribed by their respective churches or denominations.

A detailed statement of these courses will be published later in pamphlet form. Until such statement is issued all who desire farther information concerning the work or who have some specific subject in which they wish assistance through suggestion or direction, will communicate with the director of research, the American University, Washington, D. C.

A registration fee of two dollars will be required from those taking these courses and the student will be expected to defray postage both ways.

#### **EXTENSION WORK.**

It is the purpose of the American University to carry on university extension work of a popular character in the city of Washington and at other centers. This work has been initiated by the director of research, who is conducting a teachers' training class for Bible-school workers of all denominations in the city of Washington. The class meets once a week at the Foundry Methodist Episcopal Church.

#### **HISTORY.**

Opportunities for research work in history at the national capital are rich and varied. Especially is this true in the field of American history. The collections of Americana now existing in the Library of Congress constitute one of the great assets of the library. From the beginning there has been a strong effort to assemble the earliest available material that would cover the

origins and development of the national life. To this have been added the great accumulations of state papers and official documents which are in themselves of first importance. Under the State Department of the Government reference will be found as to the historical data in the possession of that department.

The very high character of the work of the Carnegie Institution of Washington, under the enlightened and enthusiastic direction of Dr. Jameson, in the field of history, offers a constantly widening source of help and inspiration. The recent purchase by the Government of valuable collections of historical works help to put the earnest student in possession of a body of properly codified historical treatises which have no equal in the country. Every facility is granted the student, and many workers and writers now are availing themselves of the unusual privileges which the Government always is glad to offer to them.

#### **POLITICAL SCIENCE AND DIPLOMACY.**

It long has been felt that Washington is the natural seat for an American school of political science and diplomacy. From time to time efforts have been made to organize and carry on successfully such a school. It is the plan of the American University in due time to give definite form to such a purpose and found and equip a fitting school for the training of those who may desire to enter the consular and diplomatic service. The unusual helps now existing in Washington toward the carrying out successfully of such a school are evident to all. The workings of the national Government itself in all its details, the sessions of Congress and the national judiciary, the public discussion of matters of diplomatic interest and the public lectures which touch on this phase of our national life, give Washington the setting for the pursuance of studies that have to do with the politics and diplomacy of the nation. To this must be added the unique collections of diplomatic papers and state documents which the Government most carefully preserves and is always glad to open to properly accredited students. This latter body of data, of course, cannot be paralleled. No serious student in this field is able to cover the subject without traversing these governmental collections. The attention of the authorities of the university already has been

called to existing fields open to students who may desire to enter upon new lines of research with promise of large results.

### LITERATURE.

The national Government long has devoted much money and labor through its appointed representatives to getting and codifying at the capital important collections of vital interest to all lovers of letters. Some of these collections have been the outcome of such long and intelligent work on the part of their makers that they now have a recognized standing of the first literary importance. We cannot here give space to a proper setting forth of these stores in the esthetic field.

As illustrations of such collections, however, we might call attention to the Watts de Peyster Collection of Napoleonana in the Smithsonian Institution, representing the love and intelligent labor of a lifelong gathering. Reference might be made to the Robert Burns Collection, probably the best in the world. No student desiring first-hand information concerning Robert Burns can neglect this collection. Again, we might cite the vast assemblage of Orientalia made in recent years by the Library of Congress, comprising thousands of volumes on the life and history of the Chinese and the Japanese. We might mention the Jacob H. Schiff Collection of Semitica, which now is one of the priceless possessions of the capital, and indeed one of the unique accumulations of the world in Jewish lore.

From these instances suggestion may be drawn as to the wide cultural facilities that students of literature find offered them in Washington.

### FINE ARTS AND MUSIC.

As a source of cultural development the Corcoran School of Art is noted in its proper place in connection with the Corcoran Gallery of Art, and in the new building which is to house the Freer Collection, one of the most notable in the world, special study and work rooms are to be provided for students, and every facility afforded for serious and continued utilization of the collection. The growing collection of paintings in the New National Museum attracts all visitors to Washington.

As a further art source the mural decorations in the public buildings are among the finest in America. The collections of illuminated manuscripts, miniatures, engravings, etchings and colored prints, constantly accreting, already are of extraordinary interest and value. The Art Commission appointed by the President, which now takes cognizance of all monumental and public architectural work, is synchronizing and developing the artistic expansion of the capital in such way as to give increasing instruction and inspiration.

One of the world-collections of musical scores and works is located in Washington. Numerous orchestral and vocal concerts of the highest character are carried on in the city every season, and several musical organizations and clubs furnish frequent feasts to music lovers and ample helps for the training of students.

#### AMERICANA.

"Washington is American history statuesque." What thus is true of the national capital in its physical aspects, is doubly true of the city in its literary deposits. Nearly all the important libraries of the capital seem to have the characteristic of a bearing upon the beginnings and early development of American life and history. Thus in the Department of State and the Smithsonian Institution there are vast stores of manuscripts and historical objects, together with the accumulated reports on expeditions and explorations of fundamental importance to the early history of our country. The archaeological and folk collections, together with detailed results of expert study of the early homes and industries of the Indians, are unique. No student in this field can hope elsewhere to find their equal.

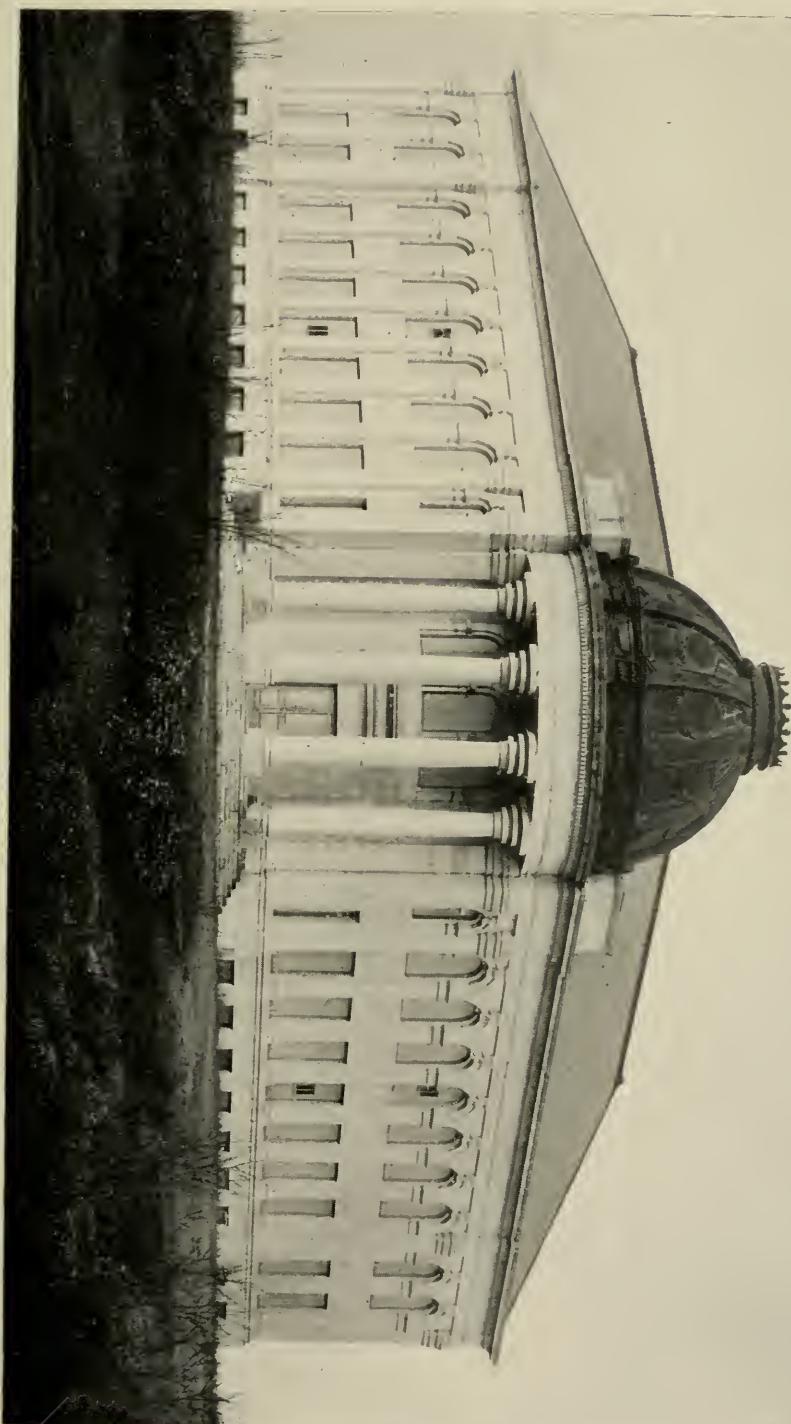
In the national libraries are gathered many manuscripts, diaries and personal papers embodying information on several periods which, as yet, are unexplored fields for students of American history. Collections related to the personalia of Washington, of Jefferson, of Lincoln, and of other great Americans, which are one of the characteristics of the city, create an atmosphere and give objective reality to the study of their lives and periods. The increasing tendency, moreover, to accumulate through the medium of the New National Museum a concrete picturing forth of the

life and activities of the various peoples and grand divisions of the great Republic, following the suggestion of the famous *Landesmuseums* of Switzerland, will be of unending interest and suggestion to all future writers dealing with American history and customs. The generous consideration now being shown by the Government to all who desire to avail themselves of these privileges forms one of the chief attractions for residence at the federal city.

#### **INTERNATIONALISM AND WORLD PEACE.**

The trend of our international relations during the last two decades as emphasized in the leadership of McKinley and Hay, Roosevelt and Root, Taft and Knox, Wilson and Bryan, has shown an increasing tendency toward comity among nations and a growing urgency toward world peace. At Washington there is the deposit of the records of this leadership. Around this deposit as a nucleus there steadily is gathering a group of associations and libraries, a vigorous literature, a succession of assemblies, and the production of an atmosphere, all looking to the same end. Here is located the headquarters of the American Peace Society with its valuable library. Here is the center of the propaganda for a true brotherhood of affiliated peoples—the Pan-American Union (see page 50). The location, moreover, at Washington, of the Carnegie Endowment for International Peace forms another vital force for world comity (see page 54).

The increasing importance of American ideals in the solution of national and world problems, which is the most significant fact of the civilization of our times, finds constant, living expression in the consular, diplomatic and legislative activities centering at the capital. Nowhere will the student find so helpful and stimulating environment for the study of internationalism and world peace as at Washington.



MCKINLEY MEMORIAL, COLLEGE OF GOVERNMENT—AMERICAN UNIVERSITY (1907)



# **RESEARCH WORK IN THE INSTITUTIONS OF THE NATIONAL GOVERNMENT AND IN OTHER INSTITUTIONS AT WASHINGTON.**

## **THE LIBRARIES AT WASHINGTON.**

The Federal Government maintains nearly thirty libraries, all of which will be accessible to the faculty and fellows of the university. Of these the Library of Congress (the National Library of the United States) is now not merely by far the largest library on this hemisphere, but the third largest in the world. Its collections comprise over 2,000,000 books and pamphlets, and a million other articles. It is being added to at the rate of 80,000 books and pamphlets, and some 50,000 other articles, annually. The Library is remarkably strong in bibliography, public documents (of all countries), Americana, economics, political science, public law and legislation, and history. It has extensive files of newspapers and periodicals. It has one of the greatest extant collections of the transactions and proceedings of learned societies. It has separate departments dealing with maps (150,000 items), music (over 600,000 items), prints (nearly 400,000 items), law (150,000 items) and manuscripts. Its manuscript collections, which alone number 1,000,000 items, are essential to the student of American history; and include not merely the papers of the Continental Congress, and of various Presidents, and numerous collections of other public men, but transcripts of important documents in England and on the Continent necessary to the student of American, including colonial, history. In addition to the general strength of the collection, the Library possesses certain collections in special fields, as in Russian literature, Scandinavian literature, Sankrit literature, Hebrew literature, and even including Chinese and Japanese.

The Library building, the largest in the world for a research library, is admirably adapted to research work; and the authori-

ties assure every facility for this to the faculty of the university and to those pursuing advanced degrees.

The Government collections outside of the Library of Congress aggregate nearly a million and a half volumes. They are attached to the various departments and scientific bureaus. Among them are collections strong in certain specialties; and at least three—in agriculture, geology and medicine—perhaps pre-eminent in their special fields. Under a provision of law, access to these is freely accorded to students.

#### DEPARTMENT OF STATE.

**Statecraft, Science of Government, and International Comity.**  
Bureau of Indexes and Archives—Director, John R. Buck.

Its collection is of unique value to students of American history, diplomacy, and consular service. It contains the list of the volumes of dispatches, notes to the Department, instructions, notes from the Department, lists of volumes of circulars, of consular instructions and consular dispatches, and lists of volumes pertaining to consular clerks, foreign consuls in the United States, and special agents.

Bureau of Rolls and Library—Director, John A. Tonner.

This bureau is a treasure-house for the student of the American Constitution and of comparative government. The archives of the bureau consist of the Declaration of Independence, laws, treaties, proclamations, executive orders and announcements, the proceedings of international commissions, documents relating to the Constitution, territorial papers, and a large body of miscellaneous material. The original copies of all laws in force in the United States are filed with the Secretary of State, and are accessible in this bureau.

The library of the Department of State is a branch of this bureau. It approximates seventy thousand volumes and is rich in works on international law, diplomacy, history, description, and travel in foreign countries, foreign laws, documents relating to foreign office work, and biographies of statesmen. It has a card catalogue.

**TREASURY DEPARTMENT.**

**Public Health and Marine Hospital Service—Preventive Medicine and Public Sanitation—Director, Surgeon General Rupert Blue.**

In the well-equipped laboratory is carried on experimental work in bacteriology, pathology, chemistry, pharmacology, biology, zoology, and other problems pertaining to the public health. Courses of instruction are given in bacteriology, epidemiology, serum therapy, disinfection, quarantine, vital statistics, and sanitary analysis.

**DEPARTMENT OF WAR.**

**Surgeon-General's Office—Medicine, Surgery and Allied Sciences. Library, Lieut. Col. Champe C. McCulloch, Jr., Librarian.**

Research work is encouraged and all facilities are given to proper persons.

The Army Medical Museum and Library, a part of the office of the Surgeon General of the Army, are open to the public. The museum contains nearly 35,000 specimens, anatomical, pathological, microscopical, photographs and negatives, and miscellaneous, that are available for use and study by physicians and others, under proper restrictions. The museum is particularly rich in specimens of military medicine and surgery, including transportation appliances, in embryology, malformations, surgical instruments and instruments of precision.

The library contains 183,000 volumes and 321,000 pamphlets relating to medicine and the allied sciences. This is the largest existing collection of books of this nature. The library is also available for use, except Sundays and holidays, and a reading room is maintained, which is open from 9 A. M. to 4:30 P. M. Books may be taken out under certain restrictions, which can be learned on application.

**Officers of Chief of Staff.**

**Historical and Military Subjects—Chief, Brig. Gen. Hugh L. Scott.**

During the past fifteen years much research work has been done in historical and military subjects. In the office are valuable reference works, such as American archives and State papers, journals of the Continental Congress, albums and newspaper

clippings of the Spanish-American War. Here also are kept military biographies, and public documents of the first fourteen congresses. Although preference is given to consulting students from the Army and the Department, the reference facilities are not limited to any class.

#### Bureau of Insular Affairs.

**Data on Insular Possessions—Chief, Brig. Gen. Frank McIntyre.**

The Library consists of an extensive collection of publications on the island possessions of the United States.

#### DEPARTMENT OF THE NAVY.

**Hydrographic Office—Engraving, Drafting and Chart Construction—Director, Capt. Thomas Washington.**

The work of this office is chart construction, and the subjects for advanced students would be engraving, drafting, plate printing, and chart construction.

#### Naval Observatory.

**Astronomy and Mathematics—Superintendent, Capt. J. A. Hoogewerff.**

The twelve-inch equatorial telescope under proper conditions is used for instruction in astronomy.

The library, in charge of Mr. W. D. Horigan, contains nearly 38,000 volumes. The subjects are astronomy, mathematics, and physics. It is supposed to contain the best collection of astronomical literature in the western hemisphere. It offers the best opportunity for advanced students of theoretical and practical astronomy and theoretical and applied mathematics.

#### Naval Medical School.

**Tropical Diseases—Medical Director, J. D. Gatewood.**

The work of the school is mainly to qualify officers of the Medical Corps of the Navy for work in the tropics. Special attention is given to bacteriological work in connection with tropical diseases and to medical zoology. Other subjects are naval hygiene, military surgery, duties of naval medical officers, naval tactics, and naval law. The library contains 16,000 volumes including many volumes of bound medical periodicals.

**Library and Naval War Office.****Naval History—Director, Charles W. Stewart.**

This office is part of the office of the Secretary of the Navy. The office is a general information bureau for naval data. Opportunities for research in naval history are excellent. The library contains 50,000 volumes.

**DEPARTMENT OF THE INTERIOR.****Patent Office—Patent Law, Chemistry and Physics—History of Inventions—Commissioner, Thomas Ewing.**

The office has issued over a million patents, which are classified in forty-three divisions, embracing all the known arts. There is a printed "Classification of Subjects of Invention." The student engaged in physical or chemical research here may consult the latest results and attainments in physics and chemistry, pure and applied.

The scientific library contains about 95,000 volumes. There is also a card catalogue of current technical literature from 1891.

Closely allied with this is the card index to chemical literature of over 400,000 cards.

Special opportunities are offered for work in patent law.

**Bureau of Education.****Pedagogical Science.**

The Bureau of Education holds unique relation to educational work throughout the land. It is under the direction of the United States Commissioner of Education, Dr. P. P. Claxton, a member of the Board of Award of the American University. The resources for research work in this bureau are rich and varied. It is equipped with the most complete and valuable library of pedagogical works, comprising 145,000 volumes, in the western hemisphere. This library furnishes the richest field for study and the collection of facts in connection with educational problems. Commissioner Claxton will welcome the opportunity to extend the usefulness of this library. Through his assistants he will be glad to help the investigator, and will throw open new fields for independent work.

**Geological Survey.****Geology—Director, George Otis Smith.**

Washington is the home of more than 100 professional geologists engaged in the most advanced work being done in the world; of the United States Geological Survey with its library of over 89,000 books, 25,500 maps and 102,000 pamphlets; of the Geological Department of the National Museum, with its collections and exhibits; of the Geological Society of Washington, the Washington Academy of Science, and other scientific associations, where geological problems are discussed, usually long before they reach the public.

The library of the Geological Survey, now one of the most complete in the world, will prove of the greatest aid. Every effort is made to assist serious workers in availing themselves of the library privileges, and every facility in the power of the bureau is offered to graduate students who are making a serious study of the subjects within the scope of the bureau's collections.

The Geological Society of Washington, the Washington Academy of Science, and other less formal geological clubs, not to mention the meetings of the National Academy of Science, and other bodies, give opportunity to hear the latest geological discoveries announced and freely discussed, as well as papers summarizing the history or latest conclusions on some of the larger problems of geology.

In addition, the geologists of Washington will, in most cases, be glad to assist the advanced student with suggestions, references, and criticisms.

**Bureau of Mines.****Methods of Mining and Assaying—Director, Dr. J. A. Holmes.**

The bureau is charged with the investigations of the methods of mining, the treatment of ores, and other mineral substances, the use of explosives and electricity, the prevention of accidents, and other inquiries and technological investigations pertinent to such industries. There is a library of 12,000 volumes.

**DEPARTMENT OF AGRICULTURE.**

**Weather Bureau—Meteorology—Chief, Charles F. Marvin.**

Advanced students in meteorology here have exceptional opportunities opened to them. The library is the strongest of the kind in existence. A station of the bureau is operated on the grounds of the University.

**Animal Pathology and Hygiene.**

**Chief, A. D. Melvin.**

This bureau allows access to its rich collection of animal parasites and pathological specimens. It is prepared to offer facilities for advanced study and research in its laboratories—pathological, biochemical, zoological, or dairy.

**Bureau of Plant Industry.**

**Botany, Plant Pathology and Mycology—Director, Dr. William A. Taylor.**

The work of the bureau is conducted in twenty-nine laboratories. In these laboratories there is a wide field for research in the adaptation of plants to the needs of men.

The Plant Industry library, where are most of the important works relating to botany, horticulture, and all subjects pertaining to plants, offers excellent facilities for research work.

**Forest Service.**

**Henry S. Graves, Forester and Chief.**

Most of the work in this department is carried on in the field. For this reason it is especially helpful. Those who are interested in forestry work should communicate with Dr. Collier, Director of Research, American University, stating definitely what particular work is desired.

**Bureau of Chemistry.**

**Applied Chemistry—Chief, Carl L. Alsberg.**

This bureau has charge of the analytical work and investigation under the Pure Food and Drugs Act. "To young men who have completed a thorough course in chemistry and who desire ex-

perience in a large laboratory, excellent opportunities are offered." But all appointees are expected to do either research or routine work, as the needs of the service may require. The library facilities are of the best.

#### Bureau of Soils.

##### Science of Soils—Chief, Milton Whitney.

The work is done both in the laboratories and in the field. Chief Whitney "has always welcomed the presence of anyone interested in the special lines of work being carried on, and has frequently made opportunities for such parties to avail themselves of the privilege of working in the laboratories for limited periods of time, or for short excursions with some one or more of the field parties." Properly trained men who wish to do advanced research work in the lines of special investigation, employed by the bureau, will be welcomed. The library facilities are excellent for the special type of work done at the bureau.

#### Bureau of Entomology.

##### Entomology—Chief, L. O. Howard.

An especially promising field for the investigator is that of certain insects as disease carriers. No better work is done anywhere in this line than in the Bureau of Entomology. Dr. Howard will offer every possible opportunity for preferred investigators who will meet the conditions demanded by the bureau. Students should address our director of research, Dr. Collier, stating the particular problems they wish to investigate. The library and collections are good.

#### Bureau of Biological Survey.

##### Distribution of Animals and Plants—Chief, H. W. Henshaw.

"It is believed that the investigations conducted in the laboratory of the survey are more thorough and cover a wider field than any similar investigations elsewhere undertaken in any part of the world." The large collections of birds, mammals and plants are very valuable, and they shed light upon problems of geographical distribution. They furnish data also in determining the food habits of the different species. The doors of the

laboratory are always open to those who desire to study methods of work. The library, though small, offers excellent facilities for study.

**Office of Experiment Stations.****Agricultural Education.**

Dr. A. C. True, a member of the Board of Award of the American University, is the Director of the extensive work of the office of the Experiment Stations. The work of this office includes relations with American and foreign institutions for agricultural research. It also has to do with the management of the experiment stations, relations with agricultural colleges and schools, farmers' institutes, and kindred institutions, and the general promotion of agricultural education, irrigation, drainage and nutrition investigations. The director will give every available facility for study and research.

**Office of Public Roads.****Road Building—Director, Logan Waller Page.**

A limited number of graduate civil engineers are appointed annually to the position of civil engineer student after having passed competitive examinations. These men are employed for a period of one year at \$50 per month and expenses while on field duty, during which time they receive practical training and instruction not only in laboratory work and methods of road administration, but also in actual road building in various parts of the country. At the end of this period they are eligible for promotion without further examination. The office has well equipped physical and chemical laboratories and a valuable library.

**DEPARTMENT OF COMMERCE.****Bureau of the Census—Statistical Science—Director, Wm. J. Harris.**

The Census Bureau is virtually a national statistical office.

**Bureau of Foreign and Domestic Commerce.****Commerce and Industry—Chief, Edward Ewing Pratt.**

The work of this bureau is to investigate the affairs of all business concerns engaged in interstate and foreign commerce, and to collect and supply useful information concerning them.

**Bureau of Standards.****Chemistry, Physics and Electricity—Director, Dr. S. W. Stratton.**

This bureau is superbly equipped. Several universities give credit to their students for work done in this bureau. Post-graduate work now is being carried on at the bureau. The fields are chemistry, physics, and electricity. Inasmuch, however, as the activity of the bureau is mainly on lines of particular investigation and special problems, the student will need to be prepared to carry out a definite plan. The precise character of the work of the Bureau of Standards must of necessity indicate the definite field available for the student. The student who has in mind a particular problem or series of investigations to pursue within the fields covered by this bureau will find here fundamental aids to help. Students must be able to carry on independent study before seeking the help of this bureau. To such investigators as can meet these conditions the officers of the bureau will afford every help and encouragement, and the work of the bureau will grant unusual opportunity for serious accomplishment. The bureau has a choice library of about 12,000 volumes on technical subjects connected with the bureau's work.

**Bureau of Fisheries.****Ichthyology—Commissioner, Hugh M. Smith.**

The bureau's library, which is the most complete in the world in respect to the fisheries and cognate subjects, is open to the public, and is available for the use of students.

The marine biological and fisheries laboratories at Woods Hole, Mass., and Beaufort, N. C., offer unusual opportunities to investigators, and it is customary to extend their facilities to competent persons. The laboratory at Woods Hole is open during the summer only, but there is a permanent staff at Beaufort, and probably one or two persons could be accommodated throughout the year, although the facilities afforded would be much more limited than during the season from June 1 to September 15. The same statement applies to the fresh-water laboratory at Fairport, Iowa.

The bureau will be pleased to co-operate in affording opportunities for research and study to persons qualified to profit by them, but it will not grant the privileges to undergraduates, and reserves the right to withdraw them from any person at any time without feeling itself bound to give specific reason for the action.

#### **Coast and Geodetic Survey.**

##### **Geodesy and Tidology—Director, Dr. O. H. Tittmann.**

The survey is constantly pursuing the study, in a theoretical and practical way, of magnetic, tidal and seismic problems. It collects and makes original hydrographic and topographic maps. The survey has paid especial attention to its library. This now is a splendidly efficient working library for the purposes of the survey. It numbers 25,000 volumes.

Dr. Tittmann gladly offers the facilities of the survey to those pursuing original investigations and to graduate students of higher institutions of learning. The number of students who can be accommodated, however, is limited. Those wishing to pursue such work as is done in this survey, therefore, should communicate with the director of research of the American University.

### **DEPARTMENT OF LABOR.**

#### **Bureau of Labor Statistics—Sociology—Commissioner, Royal Meeker.**

This bureau is charged with the duty of acquiring and diffusing information on subjects connected with labor in the most general and comprehensive sense of that word, and especially upon the relations of labor to capital, the hours of labor, the earnings of laboring men and women, and the means of promoting their material, social, intellectual, and moral prosperity.

#### **Children's Bureau.**

#### **Sociology—Chief, Julia C. Lathrop.**

This bureau endeavors to investigate and report upon all matters pertaining to the welfare of children and child life among all classes of people within the United States. It investigates the question of infant mortality, the birth rate, orphanage, juvenile courts, desertion, dangerous occupations, accidents and

diseases of children, employment and legislation affecting children in the several States and Territories.

### THE SMITHSONIAN INSTITUTION.

Secretary, Dr. Charles D. Walcott.

The Smithsonian Institution was established in 1846 through the bequest of James Smithson, F. R. S., who left his estate to the United States to found in Washington an institution "for the increase and diffusion of knowledge among men."

The Institution has six governmental branches—the National Museum, the Bureau of American Ethnology, the National Zoological Park, the Astrophysical Observatory, the International Exchange Service, and the Regional Bureau for the United States of the International Catalogue of Scientific Literature. A laboratory for aeronautical research, called the Langley Aerodynamical Laboratory, recently has been established.

The Smithsonian Institution maintains a library of about 250,000 volumes, the greater portion of which, called the Smithsonian Deposit, is placed in the Library of Congress, but is accessible to investigators working in the Institution. The library includes one of the largest collections of transactions of learned societies in America. A reading room is maintained in the Smithsonian building where the latest issues of about 262 foreign and domestic scientific periodicals are available to readers.

The National Museum is the depository of the national collections which are very large and diversified. It is especially rich in the natural history of America, including zoology, botany, geology, palaeontology, archaeology, and ethnology, and has extensive series relating to the arts and industries, the fine arts and American history. Dr. Richard Rathbun is in charge.

The National Gallery of Art contains the George P. Marsh collection of etchings, engravings, and books on art; the Charles L. Freer collection, comprising numerous paintings, etchings, etc., by Whistler and other American artists, and many examples of Japanese and Chinese art; the Harriet Lane Johnston collection, including a number of portraits by British masters; and the William T. Evans collection of paintings by contemporary American artists.

The National Museum offers exceptional opportunities for properly accredited investigators to make researches in systematic natural history. Its collections of North American, African, European and East Indian mammals are very extensive, as are also those of American and exotic birds, reptiles, fishes, insects and marine invertebrates. The collections of fossil invertebrates are the largest in the country, and those of rocks, minerals and ores are also very important. The same is true of the collections representing the costumes, weapons, utensils, and ceremonial objects of the Indians, and their prehistoric remains. There are also very important ethnological collections from the East Indies and some other parts of the Old World. The study of physical anthropology is aided by large series of skulls and skeletons.

The collections illustrating the industries include extensive series of raw and manufactured textiles and mineral products; also comparative series of arms, machines, vehicles, etc., and fishery and forestry collections. Other series of especial interest in this connection are those representing the history and processes of photography and the graphic arts generally, which are both of great size and importance. There are also important collections (chiefly loans) of laces and embroideries and other art fabrics.

The museum possesses a very large number of relics, mementoes, and other objects illustrating American history from colonial times to the present, many of which are unique or of special significance. It has also extensive series of medals, coins and postage stamps.

The museum has a library of about 60,000 books and pamphlets relating to all departments of its work, and especially to natural history, geology, anthropology, museum history and administration and expositions.

The Bureau of American Ethnology is engaged in the collection and publication of information relative to the American Indians and the natives of Hawaii. It carries on extensive field work in the investigation of the languages, customs, laws, ceremonies, and physical characteristics of the American aborigines, and engages also in archaeological researches. The collections made by the bureau are deposited in the National Museum.

The bureau has a library of about 21,000 volumes relating to ethnological and archaeological subjects, and also possesses a large number of manuscript vocabularies of Indian languages, including those of some tribes now extinct.

The National Zoological Park, established by Congress for the advancement of science and the instruction and recreation of the people, occupies an area of about 167 acres in Rock Creek valley. It maintains a collection of about 1,500 animals, chiefly birds and mammals, including nearly all the principal American types, and also such large exotic forms as the lion, tiger, elephant, camel hippopotamus, etc. The Zoological Park offers opportunities for the study of the form, growth and habits of animals, and of comparative anatomy and pathology, but it has at present no anatomical laboratory.

The Astrophysical Observatory, located on the Smithsonian grounds, is equipped for the study of solar radiation and other solar phenomena. It also carries on work at a station on the summit of Mt. Wilson, California.

The International Exchange Service is the agency of the United States Government for the exchange of scientific, literary and governmental publications with foreign governments, institutions, and investigators.

The International Catalogue of Scientific Literature is a classified list, in book form, of current publications relating to all branches of science. The United States by an annual appropriation of Congress to the Smithsonian Institution supports a regional bureau. This bureau assembles and classifies American scientific literature and transmits the lists to London where they are incorporated with matter from similar regional bureaus in Europe and published in seventeen annual volumes.

#### PAN-AMERICAN UNION.

**Director General, John Barrett.**

The Pan-American Union was organized for the purpose of developing and maintaining closer relations of commerce and friendship between the twenty-one Republics of the western

hemisphere. It is not a government bureau, but an international institution. Practically, it is a bureau of general information for everything pertaining to Latin America. The library contains 30,000 volumes relating to Latin America, on historical, economical, legal (very strong), and commercial subjects. It receives all the important newspapers and periodicals of Latin America, and has bound files of the official and the principal newspapers since 1905. There is also a card index of the periodical literature of the world since 1911. Our director of research, Dr. Collier, has been assured by the authorities of the Pan-American Union that they will cooperate with the American University, and they offer every possible facility to those doing research work.

#### INTERSTATE COMMERCE COMMISSION.

Interstate Law and Transportation—Chairman of Commission, James S. Harlan.

The Interstate Commerce Commission is an independent bureau of the Government, which has for its object the administration of the various acts of Congress relating to the regulation of interstate carriers. The records of the Commission are complete from its organization, are admirably arranged and indexed, and, with the few exceptions that necessarily are confidential, are open to the public. The library contains 16,000 volumes, 10,000 pamphlets, and 125 maps. It is especially strong in railroad literature and law. Within the last few years the endeavor has been to have a file of complete records showing the laws passed by the various States regulating railroads, and also the rulings and findings of the several State railroad commissions. In addition the Commission has aimed to accumulate a complete collection of books and pamphlets, public and private, relating to all phases of transportation, both domestic and foreign, and to include railroads, canals and other waterways, telegraphs, telephones, and common roads. In fact, it hopes to obtain all literature which would be of interest to the student of transportation, its management and regulation. A large periodical list is maintained.

**UNITED STATES BOTANIC GARDEN.****Botany—Superintendent, George W. Hess.**

The collection of the Botanic Garden consists of about five thousand specimens. The tropical collection is rich in palms and in ferns of the genus *ficus*. There is a large collection of succulents, orchids, and insectivorous plants. There is also a miscellaneous general collection. The outdoor collection is grouped after Doctor Gray's five divisions.

**CIVIL SERVICE COMMISSION.****President, John A. McIlhenny.**

Library of 4,200 volumes and pamphlets relating to civil service and civil service reform in the United States and foreign countries.

**COLUMBIAN INSTITUTION FOR THE DEAF.****President, Percival Hall.**

This institution has a library of 5,000 volumes, which is one of the best collections in existence.

**GOVERNMENT HOSPITAL FOR THE INSANE.****Pathological Psychology—Superintendent, Dr. William A. White.**

In this great institution, with its spacious grounds, there are two main laboratories, the pathological and the psychological. The subjects of research here include pathology, clinical pathology, histopathology, bacteriology, and chemistry. The student should understand that these laboratories exist solely for the study of problems of insanity, and one must be sufficiently advanced to meet the requirements of the Superintendent, who passes upon all applicants. Those sufficiently advanced to pursue original investigation will be welcomed.

The medical library has about 4,000 volumes, and is especially strong in neurology and psychiatry. Forty-five medical journals are currently received.

**CORCORAN GALLERY OF ART.****The Fine Arts—Director, F. B. McGuire.**

The Corcoran Gallery of Art, the gift of the late W. W. Corcoran to the public, was opened in 1874, and the Corcoran School of Art began its work in 1875. Mr. E. D. Messer is Principal of the School of Art. The collection of paintings is large in number and of higher order in merit. The casts of antique sculpture include some of the finest specimens of Greek sculpture. The casts from the Renaissance period represent some of the best works of that period. There are also casts of modern sculpture with a collection of marbles. There is a small collection of cloisonne, porcelains and glass, and a large collection of electro-type reproductions. The original bronzes by Antoine-Louis Barye number over one hundred, and is the largest collection existing of the works of this master.

**THE VOLTA BUREAU.****Scientific Research in the Interest of the Deaf—Fred DeLand, Superintendent.**

The Volta Bureau was founded and endowed by Alexander Graham Bell in 1888. It was the outgrowth of extensive researches he engaged in during the years 1878-1883, to determine the causes of deafness and to what extent the human race is susceptible of variation by selection. It has a reference library, and is endeavoring to include in its unique collection of literature relating to the deaf a copy of every book, periodical, pamphlet and leaflet relating to any phase of deafness and published in any part of the world during any period.

Among its other functions, the Volta Bureau serves as a world's clearing-house or medium of exchange between the schools and the various associations of the deaf in all parts of the world. It also serves as a bureau of information for parents and friends of deaf children, for physicians, otologists, the clergy and all who desire available information concerning any phase of deafness.

**THE NATIONAL GEOGRAPHIC SOCIETY.**

Gilbert H. Grosvenor, Director and Editor.

The National Geographical Society is the largest scientific association in the world. It has been the purpose of the society from the beginning to collect rare maps and rare books on geographical subjects. These rich collections have been deposited with the Library of Congress, where they may be easily accessible.

The society is also a bureau of information for things geographical. It is always ready to answer geographical questions, and to put inquirers on the track of geographical knowledge. The resources of the society are generously placed at the disposal of the American University.

**CARNEGIE ENDOWMENT FOR INTERNATIONAL PEACE.**

Miss Kathryn Sellers, Librarian.

The establishment at Washington of the Carnegie Endowment for International Peace marks a distinct step of progress in the welfare of humanity. The enlightened leadership of this Endowment already has made itself felt throughout the habitable earth. The Endowment constantly is gathering around itself sources of information, data, and results of its own investigations which are priceless to any student of the present tendency of the times and of the changing course in human affairs. Mr. Carnegie's generous interest in this special field of his benefactions gives promise of its continued expansion in scope and in accomplishment.

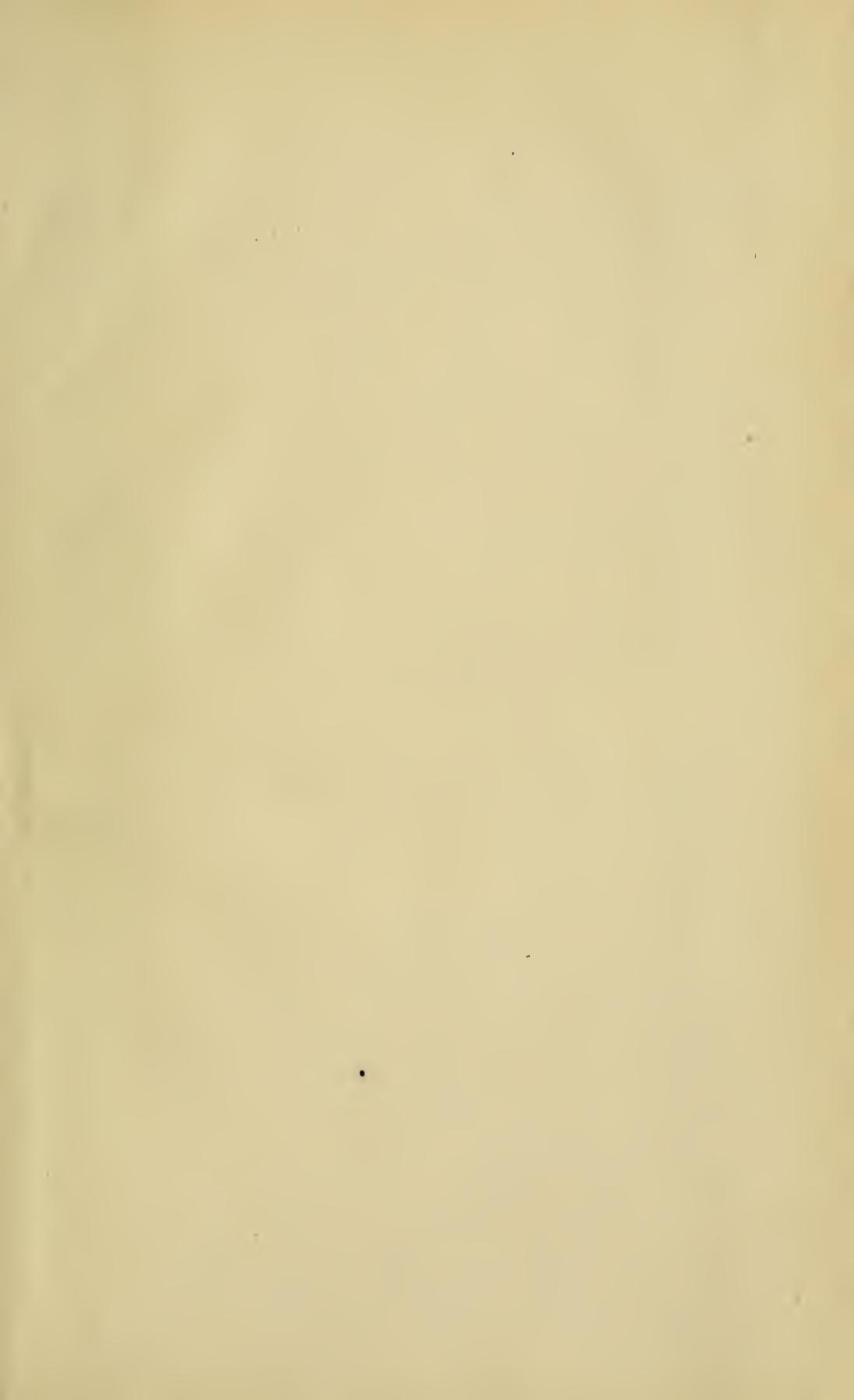
The library, open for students, contains a full and growing collection of peace literature; books on political science, particularly those relating to international law and relations; history and biography relating to international relations; a law collection covering the English Reprint of Court Reports, United States Supreme Court Reports, Reports of the Court of Claims, Federal Cases, United States Statutes at Large, the Revised Statutes, the Federal Statutes annotated, and such standard works as the Continental Legal History Series. The treaty collection is practically complete. It receives many foreign office reports. It has also a complete set of the Annals and Debates in Congress, the Congressional Globe and Record.

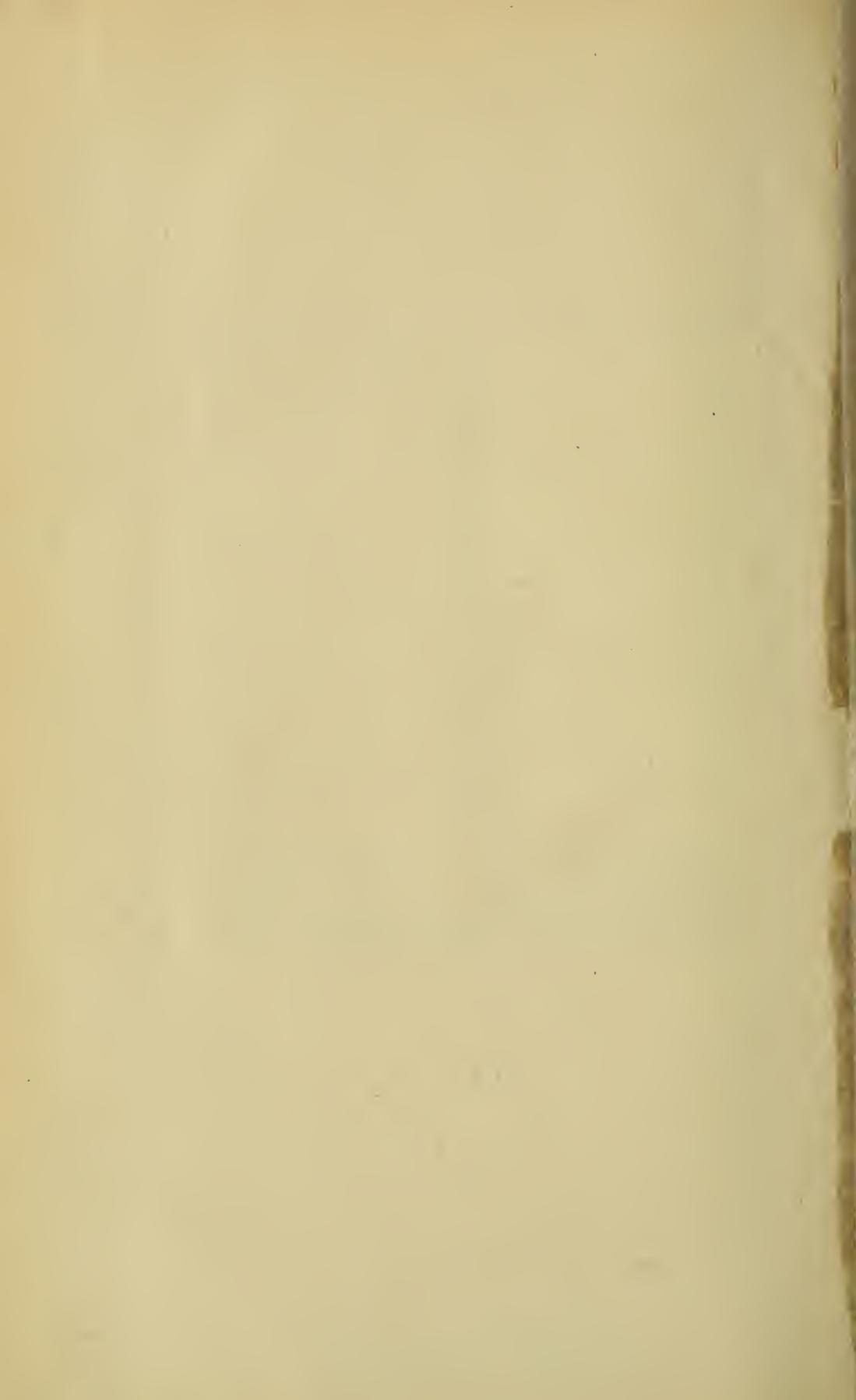
The librarian is glad to render such assistance as her duties may permit.



**FORM FOR WILL.**

I give and bequeath to "The American University," a corporation in the District of Columbia, the sum of (insert amount), and the receipt of its Treasurer shall be a sufficient discharge to my executors for the same.









**DOES NOT CIRCULATE**

